

SAFETY DATA SHEETS (SDS)

- 1. STEEL FRAMING**
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STEEL FRAMING AND SCREWS

1. GALVANIZED CARBON STEEL

- a. US Steel – Sheet Steel**
- b. ClarkDietrich – Sheet Steel**
- c. Telling Buildstrong – Sheet Steel**

2. SCREWS

- a. Grabber - Screws**



United States Steel Corporation

Galvanized (Hot Dipped) Sheet–Carbon Steel Safety Data Sheet (SDS)

USS IHS Number: 1650
(Replaces USS Code Number: 3C012)

Locations: Irvin, Fairfield, Gary, Granite City, Great Lakes, Hamilton, Fairless

Original: 12/16/2010

Revision: 6/30/2020

Section 1 – Identification

- 1(a) Product Identifier Used on Label:** Galvanized (Hot Dipped) Sheet–Carbon Steel
- 1(b) Other Means of Identification:** Galvannealed (Hot Dipped) Sheet–Carbon Steel, ACRYZINC Sheet–Carbon Steel
- 1(c) Recommended Use of the Chemical and Restrictions on Use:** None
- 1(d) Name, Address, and Telephone Number:**
 United States Steel Corporation Phone number: (412) 433-6840 (8:00 am to 5:00 pm)
 600 Grant Street, Room 1662 FAX: (412) 433-5019
 Pittsburgh, PA 15219-2800
- 1(e) Emergency Phone Number:** 1-800-262-8200 (CHEMTREC)

Section 2 – Hazard(s) Identification

2(a) Classification of the Chemical: As sold, this product, **Galvanized (Hot Dipped) Sheet–Carbon Steel** is not hazardous according to the criteria specified in REACH [REGULATION (EC) No 1907/2006] and CLP [REGULATION (EC) No 1272/2008]. Under 29 CFR 1910.1200 Hazard Communication Standard, steel products are considered mixtures due to further processing which may produce dusts and or fume. The categories of Health Hazards as defined in “GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev. 3” United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information. Precautionary Statement/Emergency Overview: This formed solid metal product poses little or no immediate health or fire hazard. When product is subjected to welding, burning, melting, sawing, brazing, grinding or other similar processes, potentially hazardous airborne particulate and fumes may be generated.

2(b) Signal Word, Hazard Statement(s), Symbols and Precautionary Statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Carcinogenicity - 2 Toxic to Reproduction - 2 Single Target Organ Toxicity (STOT) Repeat Exposure - 1	DANGER	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs through prolonged or repeated inhalation exposure. Harmful if swallowed. May cause an allergic skin reaction. May cause respiratory irritation. Causes eye irritation.
	Acute Toxicity-Oral 4 Skin Sensitization - 1 STOT Single Exposure - 3		
NA	Eye Irritation - 2B		

Precautionary Statement(s)

Preventative	Response	Storage/Disposal
Do not breathe dusts / fume / spray. Wear protective gloves / protective clothing / eye protection / face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in well ventilated areas. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.	If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.	Dispose of contents in accordance with federal, state and local regulations.

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Section 2 – Hazard(s) Identification (continued)

2(c) Hazards Not Otherwise Classified: None Known

2(d) Unknown Acute Toxicity Statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical Name, Common Name (synonyms), CAS Number and Other Identifiers, and Concentration:

Chemical Name	CAS Number	EC Number	% weight
Iron	7439-89-6	231-096-4	>95
Manganese	7439-96-5	231-105-1	≤2.0
Nickel	7440-02-0	231-111-4	≤1.0
Metallic Coating			
Iron	7439-89-6	231-096-4	≤0.8
Zinc	7440-66-6	231-175-3	0.15 – 9.1

EC- European Community

CAS- Chemical Abstract Service

Note: Depending on customer specifications, product surface may be treated with trace amounts (<0.1%) of corrosion-inhibiting or rust preventative that contains hexavalent chromium as applied.

Section 4 – First-aid Measures

4(a) Description of Necessary Measures: If exposed, concerned or feel unwell: Get medical advice/attention.

- **Inhalation: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.). If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Eye Contact: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical advice attention. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Skin Contact:** If on skin: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse.
- **Ingestion: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.). If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most Important Symptoms/Effects, Acute and Delayed (chronic):

- **Inhalation: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion: Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped is not likely to present an acute or chronic health effect.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not applicable for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards Arising from the Chemical: Not applicable for this product as sold/shipped. When burned, toxic smoke and vapor may be emitted.

5(c) Special Protective Equipment and Precautions for Fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not applicable for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and Materials for Containment and Clean Up: Not applicable for this product as sold/shipped. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for Safe Handling: Not applicable for Galvanized (Hot Dipped) Sheet–Carbon Steel as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product.

7(b) Conditions for Safe Storage, including any Incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): Galvanized (Hot Dipped) Sheet–Carbon Steel as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as high temperature (burning, welding), sawing, brazing, machining and grinding may produce fumes and/or particulates. The following exposure limits are offered as reference, for an experience industrial hygienist to review.

Ingredients	8(a) OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Iron	10 mg/m ³ (iron oxide fume)	5.0 mg/m ³ (iron oxide, respirable fraction ⁵)	5.0 mg/m ³ (iron oxide dust and fume)	2,500 mg/m ³ (as Fe)
Manganese	“C” 5.0 mg/m ³ (as fume & inorganic compounds, as Mn)	0.02 mg/m ³ (as fume & inorganic compounds, as Mn, respirable fraction) 0.1 mg/m ³ (as fume & inorganic compounds, as Mn, inhalable fraction ⁶)	1.0 mg/m ³ (as fume & inorganic compounds, as Mn) “STEL” 3.0 mg/m ³ (as fume & inorganic compounds, as Mn)	500 mg/m ³ (as Mn)
Nickel	1.0 mg/m ³ (metal, insoluble & soluble compounds, as Ni)	1.5 mg/m ³ (metal, as Ni, as inhalable fraction) 0.2 mg/m ³ (insoluble compounds, as Ni, inhalable fraction, inorganic only) 0.1 mg/m ³ (soluble compounds, as Ni, inhalable fraction, inorganic only)	0.015 mg/m ³ (metal & insoluble and soluble compounds, as Ni)	10 mg/m ³ (as Ni)
Zinc	15 mg/m ³ (as zinc oxide, total dust) 5.0 mg/m ³ (as zinc oxide, respirable fraction & zinc oxide fume)	2.0 mg/m ³ (as zinc oxide, respirable fraction) “STEL” 10 mg/m ³ (as zinc oxide, respirable fraction)	5.0 mg/m ³ (as zinc oxide dust or fume) “STEL” 10 mg/m ³ (as zinc oxide fume) “C” 15 mg/m ³ (as zinc oxide dust)	500 mg/m ³ (as zinc oxide)

NE - None Established

- OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (“C”) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
- Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes. DSEN – May cause dermal sensitization. This notation is used to indicate the potential for dermal sensitization resulting from the interaction of an absorbed agent and ultraviolet light (i.e. photosensitization). RSEN – May cause respiratory sensitization.
- The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
- The “immediately dangerous to life or health air concentration values (IDLHs)” are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970s by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994. Ca is designated as carcinogen.
- Respirable fraction. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in ACGIH 2020 TLVs[®] and BEIs[®] Appendix D, paragraph C.
- Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2020 TLVs[®] and BEIs[®] (Biological Exposure Indices) Appendix D, paragraph A.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

8(c) Individual Protection Measures:

- Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

Warning! Air-purifying respirators both negative-pressure and powered-air do not protect workers in oxygen-deficient atmospheres.

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Section 8 - Exposure Controls / Personal Protection (continued)

8(c) Individual Protection Measures (continued):

- **Eyes:** Wear appropriate eye protection to prevent eye contact. For operations, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin:** Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

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|--|---|
| <p>9(a) Appearance (physical state, color, etc.): Metallic Gray, Odorless</p> <p>9(b) Odor: NA</p> <p>9(c) Odor Threshold: NA</p> <p>9(d) pH: NA</p> <p>9(e) Melting Point/Freezing Point: ~2750°F (~1510°C), Coating: ~2750°F (~1510°C)</p> <p>9(f) Initial Boiling Point and Boiling Range: Coating: ~1700 °F (~927°C)</p> <p>9(g) Flash Point: NA</p> <p>9(h) Evaporation Rate: NA</p> <p>9(i) Flammability (solid, gas): Non-flammable, non-combustible</p> <p>NA - Not Applicable
ND - Not Determined for product as a whole</p> | <p>9(j) Upper/lower Flammability or Explosive Limits: NA</p> <p>9(k) Vapor Pressure: NA</p> <p>9(l) Vapor Density (Air = 1): NA</p> <p>9(m) Relative Density: 7.85 g/cc, Coating: 7.14 g/cc</p> <p>9(n) Solubility(ies): Insoluble</p> <p>9(o) Partition Coefficient n-octanol/water: ND</p> <p>9(p) Auto-ignition Temperature: NA</p> <p>9(q) Decomposition Temperature: ND</p> <p>9(r) Viscosity: NA</p> |
|--|---|

Section 10 - Stability and Reactivity

- 10(a) Reactivity:** Not Determined (ND)
- 10(b) Chemical Stability:** Steel products are stable under normal storage and handling conditions.
- 10(c) Possibility of Hazardous Reaction:** None Known
- 10(d) Conditions to Avoid:** Storage with strong acids or calcium hypochlorite.
- 10(e) Incompatible Materials:** Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.
- 10(f) Hazardous Decomposition Products:** Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11(a-e) Information on toxicological effects: The following toxicity data has been determined for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Acute Toxicity Hazard (covers Categories 1-5)	NA*	4 ^a		Warning	Harmful if swallowed.
Eye Damage/ Irritation (covers Categories 1, 2A and 2B)	NA*	2B ^c	No Pictogram	Warning	Causes eye irritation.
Skin/Dermal Sensitization (covers Category 1)	NA*	1 ^d		Warning	May cause an allergic skin reaction.
Carcinogenicity (covers Categories 1A, 1B and 2)	NA*	2 ^e		Warning	Suspected of causing cancer.
Toxic to Reproduction (covers Categories 1A, 1B and 2)	NA*	2 ^h		Warning	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	NA*	3 ⁱ		Warning	May cause respiratory irritation.

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Section 11 - Toxicological Information (continued)

11(a-e) Information on toxicological effects (continued):

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
STOT following Repeated Exposure (covers Categories 1 and 2)	1	1 ^j		Danger	Causes damage to lungs through prolonged or repeated inhalation exposure.

* Not Applicable

Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC₅₀ or LD₅₀ has been established for **Galvanized (Hot Dipped) Sheet–Carbon Steel**. The following data has been determined for the components:

- **Iron:** Rat LD₅₀ =98.6 g/kg (REACH)
Rat LD₅₀ =1060 mg/kg (IUCLID)
Rat LD₅₀ =984 mg/kg (IUCLID)
Rabbit LD₅₀ =890 mg/kg (IUCLID)
Guinea Pig LD₅₀ =20 g/kg (TOXNET)
Human LD_{LO} =77 g/kg (IUCLID)
- **Nickel:** LD₅₀ >9000 mg/kg (Oral/Rat); NOAEC >10.2 mg/l (Inhalation/Rat)
- **Manganese:** Rat LD₅₀ > 2000 mg/kg (REACH)
Rat LD₅₀ > 9000 mg/kg (NLM Toxnet)
- **Zinc:** Rat LD₅₀ > 2000 mg/kg

b. No Skin (Dermal) Irritation data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture or its components.

c. No Eye Irritation data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture. The following Eye Irritation information was found for the components:

- **Iron:** Causes eye irritation.
- **Nickel:** Slight eye irritation from particulate abrasion only.

d. No Skin (Dermal) Sensitization data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture. The following Skin (Dermal) Sensitization information was found for the components:

- **Nickel:** May cause allergic skin sensitization.

e. No Respiratory Sensitization data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture or its components.

f. No Germ Cell Mutagenicity data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture. The following Mutagenicity and Genotoxicity information was found for the components:

- **Iron:** IUCLID has found some positive and negative findings in vitro.
- **Nickel:** EU RAR has found positive results in vitro and in vivo but insufficient data for classification.

g. Carcinogenicity: IARC, NTP, and OSHA do not list **Galvanized (Hot Dipped) Sheet–Carbon Steel** as carcinogens. The following Carcinogenicity information was found for the components:

- **Welding Fumes:** IARC-2B, possibly carcinogenic to humans; NIOSH–Ca, potential occupational carcinogen.
- **Nickel and certain nickel compounds** – IARC-1 (compounds), carcinogen to humans; IARC-2B (elemental & alloys), possibly carcinogenic to humans; ACGIH TLV-A1 (insoluble compounds, as Ni), confirmed human carcinogen; TLV-A5 (elemental), not suspected as a human carcinogen; NTP–K, known to be a carcinogen; NIOSH–Ca, potential occupational carcinogen.
- **Iron Oxide (Fe₂O₃):** IARC-3, unclassifiable as to carcinogenicity in humans; ACGIH TLV-4, not classifiable as a human carcinogen.
- **Manganese (inorganic compounds, as Mn):** ACGIH TLV-A4, not classifiable as a human carcinogen; EPA-D, not classifiable as to human carcinogenicity (CBD, cannot be determined).
- **Manganese (fume, as Mn):** EPA-D, not classifiable as to human carcinogenicity (CBD, cannot be determined).
- **Zinc (compounds, oxide, as Zn):** EPA-II, inadequate information to assess carcinogenic potential & EPA-D not classifiable as to human carcinogenicity & EPA-I, data are inadequate for assessment of human carcinogenic potential.

h. No Toxic to Reproduction data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture. The following Toxic to Reproductive information was found for the components:

- **Nickel:** Effects on fertility.

i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a mixture. The following STOT following a Single Exposure data was found for the components:

- **Iron:** Irritating to respiratory tract.

j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as a whole. The following STOT following Repeated Exposure data was found for the components:

- **Nickel:** Rat 4 wk inhalation LOEL 4 mg/m³ Lung and Lymph node histopathology. Rat 2 yr inhalation LOEL 0.1 mg/ m³ Pigment in kidney, effects on hematopoiesis spleen and bone marrow and adrenal tumor. Rat 13 Week Inhalation LOAEC 1.0 mg/m³ Lung weights, and Alveolar histopathology.
- **Manganese:** Inhalation of metal fumes - Degenerative changes in human brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.*, 1966).

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2020, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

Section 11 - Toxicological Information (continued)

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects by component:

- **Iron and oxides:** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage.
- **Manganese and oxides:** Manganese and Manganese oxide are harmful if swallowed.
- **Nickel and oxides:** Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin.
- **Zinc and zinc oxides:** Not Reported/ Not Classified

Delayed (chronic) Effects by component:

- **Iron and oxides:** Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by IARC.
- **Manganese and oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (Manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to MnO including: speed and coordination of motor function are especially impaired.
- **Nickel and oxides:** Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer in humans. Causes damage to lungs through prolonged or repeated inhalation exposure. IARC lists nickel and certain nickel compounds as Group 2B carcinogens (sufficient animal data). ACGIH 2020 TLVs® and BEIs® lists insoluble nickel compounds as confirmed human carcinogens. Suspected of damaging the unborn child.
- **Zinc and zinc oxides:** Zinc is a low health risk by inhalation and should be treated as a nuisance dust. Inhalation of zinc oxide fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Galvanized (Hot Dipped) Sheet–Carbon Steel** as sold/shipped. However, individual components of the product when processed have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide:** LC₅₀: >1000 mg/L; Fish 48 h-EC₅₀ > 100 mg/L (Currenta, 2008k); 96 h-LC₀ ≥ 50,000 mg/l. Test substance: Bayferrox 130 red (95 – 97% Fe₂O₃; < 4% SiO₂ and Al₂O₃) (Bayer, 1989a).
- **Nickel Oxide:** IUCLID found LC₅₀ in fish, invertebrates and algae > 100 mg/l.
- **Zinc:** EU RAR lists as Category 1 Very toxic to aquatic life with long lasting effects.

12(b) Persistence & Degradability: No Data Available

12(c) Bioaccumulative Potential: No Data Available

12(d) Mobility (in soil): No data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Category 1

Signal Word: Warning

Hazard Symbol:



Hazard Statement: Very Toxic to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

Disposal: **Galvanized (Hot Dipped) Sheet–Carbon Steel** should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Galvanized (Hot Dipped) Sheet–Carbon Steel in its original form. Any alterations can void this information.

Galvanized (Hot Dipped) Sheet–Carbon Steel

USS IHS No.: 1650

Rev. 6/20

Section 15 - Regulatory Information (continued)

Other Regulations:

WHMIS Classification (Canadian): The product, **Galvanized (Hot Dipped) Sheet–Carbon Steel** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Iron	Combustible dusts - Category 1
Manganese	Reproductive toxicity - Category 2; Specific target organ toxicity - repeated exposure - Category 1; Combustible dusts*
Nickel	Skin sensitization – Category 1; Carcinogenicity – Category 2; Specific target organ toxicity – repeated exposure - Category 1

*This product could belong to the hazard class "Combustible dust", based on various factors related to the combustibility and explosiveness of its dust, including composition, shape and size of the particles

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: United States Steel Corporation

Revision History:

6/30/2020 – Update Sections 2, 8, 11, 15

9/11/2018 – Update Section 3

8/01/2018 – Update Sections 2, 8, 11, 15

5/01/2017 – Update WHMIS 2015

4/28/16 – Update of Adding Fairless to Locations

Expiration Date: 6/30/2023 (For shipments to Canada only)

4/1/2014 - Update to OSHA HAZ COM 2012

12/16/10 – Update of content and format to comply with GHS. Replaces USS Code 3C012

8/1/1985 - Original

Additional Information:

Hazardous Material Identification System (HMIS) Classification

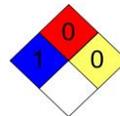
Health Hazard	1
Fire Hazard	0
Physical Hazard	0

HEALTH= 1, Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn.

PHYSICAL HAZARD= 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

National Fire Protection Association (NFPA)



HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FIRE = 0, Materials that will not burn.

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH American Conference of Governmental Industrial Hygienists	NIF No Information Found
BEIs Biological Exposure Indices	NIOSH National Institute for Occupational Safety and Health
CAS Chemical Abstracts Service	NTP National Toxicology Program
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act	ORC Organization Resources Counselors
CFR Code of Federal Regulations	OSHA Occupational Safety and Health Administration
CNS Central Nervous System	PEL Permissible Exposure Limit
GI, GIT Gastro-Intestinal, Gastro-Intestinal Tract	PNOR Particulate Not Otherwise Regulated
HMIS Hazardous Materials Identification System	PNOC Particulate Not Otherwise Classified
IARC International Agency for Research on Cancer	PPE Personal Protective Equipment
LC50 Median Lethal Concentration	ppm parts per million
LD50 Median Lethal Dose	RCRA Resource Conservation and Recovery Act
LD_{Lo} Lowest Dose to have killed animals or humans	RTECS Registry of Toxic Effects of Chemical Substances
LEL Lower Explosive Limit	SARA Superfund Amendment and Reauthorization Act
LOEL Lowest Observed Effect Level	SCBA Self-contained Breathing Apparatus
LOAEC Lowest Observable Adverse Effect Concentration	SDS Safety Data Sheet
µg/m³ microgram per cubic meter of air	STEL Short-term Exposure Limit
mg/m³ milligram per cubic meter of air	TLV Threshold Limit Value
Mppcf million particles per cubic foot	TWA Time-weighted Average
MSHA Mine Safety and Health Administration	UEL Upper Explosive Limit
NFPA National Fire Protection Association	

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, United States Steel Corporation makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

Section 1 – Identification

1(a) Product Identifier used on Label: Prime Coated Steel Sheet (Mill Certified) per ASTM A653-20

NOTE: Due to multiple steel sources, PRIME (Mill Certified) steel must be requested by customer when placing order Cold-Formed Steel framing products to ensure steel with the composition information listed in Section 3 is received.

1(b) Use/Description: Coated Steel Sheet for thin gauge framing products.

1(d) Products: Cold-Formed Steel Framing components and accessories for Interior and Exterior Finishing applications.

1(d) Synonyms: Hot Band, Cold Rolled, P&O, Galvanized.

1(e) Company Identification and Emergency Contact Information: ClarkDietrich

Corporate Office:

9050 Centre Point Drive, Suite 400
West Chester, OH 45069

Phone: 513-870-1100

Fax: 513-870-1300

<http://www.clarkdietrich.com/>

Manufacturing Locations:

Baltimore, MD
Dallas, TX
Rochelle, IL

Pasadena, TX
Vienna, OH
Sacramento, CA

Bristol, CT
McDonough, GA
Warren, OH

Dade City, FL
Riverside, CA
Oklahoma City, OK

Section 2 – Hazard(s) Identification

2(a) Classification of the chemical: Coated Steel Sheet is considered an article under Reach regulation (REACH REGULATION (EC) No 1907/2006) and is not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008). However, Coated Steel Sheet is not exempt as an article under OSHA's Hazard Communication Standard (29 CFR 1910.1200) due to its downstream use, thus this product is considered a mixture and a hazardous material. Therefore, the categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev.3" United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information.

2(b) Signal word, hazard statement(s), symbols and precautionary statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Carcinogenicity - 2 Reproductive Toxicity - 2 Single Target Organ Toxicity (STOT) Repeat Exposure -1	Danger	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.
	Acute Toxicity-Oral - 4 Skin Sensitization - 1 STOT Single Exposure - 3		Harmful if swallowed. May cause an allergic skin reaction. Harmful in contact with skin. May cause respiratory irritation.
NA	Eye Irritation-2B		Causes eye irritation.

Precautionary Statement(s):

Prevention	Response	Storage/Disposal
Do not breathe dusts / fume / gas / mist / vapor / spray. Wear protective gloves / protective clothing / eye protection / face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in well ventilated areas. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.	If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. Call a poison center/doctor if you feel unwell.	Dispose of contents in accordance with federal, state and local regulations.

2(c) Hazards not otherwise classified: None Known

2(d) Unknown acute toxicity statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical name, common name (synonyms), CAS number and other identifiers, and concentration:

Chemical Name	Symbol	CAS Number	EC Number	% weight ^B
Iron	Fe	7439-89-6	231-096-4	98.839-98.095
Carbon	C	7440-44-0	231-153-3	0.020-0.150
Manganese	Mn	7439-96-5	231-105-1	0.400-0.600
Phosphorus	P	7723-14-0	231-768-7	0.020-0.100
Sulfur	S	7704-34-9	231-722-6	0.020-0.035
Copper	Cu	7440-50-8	231-159-6	0.250-0.250
Nickel	Ni	7440-02-0	231-111-4	0.200-0.200
Chromium	Cr	7440-47-3	231-157-5	0.150-0.150
Molybdenum	Mo	7439-98-7	231-107-2	0.060-0.060
Vanadium	V	7440-62-2	231-171-1	0.008-0.100
Niobium (Columbium)	Nb	7440-03-1	231-113-5	0.008-0.100
Titanium	Ti	7440-32-6	231-142-3	0.025-0.150
Aluminum	Al	7429-90-5	231-072-3	0.000-0.010 ^A
Nitrogen	N	7727-37-9	231-783-9	0.000-0.000 ^A
Boron	B	7440-42-8	231-151-2	0.000-0.000 ^A

EC - European Community

CAS - Chemical Abstract Service

- All commercial steel products contain small amounts of various elements in addition to those listed. These small quantities are frequently referred to as “trace” or “residual” elements that generally originate in the raw materials used. Steel products may contain the following trace or residual elements including typical percentages for the elements identified: aluminum (0.01-0.5), boron (≤ 0.005 max, typically 0.001%), calcium (≤ 0.005 max, typically 0.0003%), nitrogen (≤ 0.01 max, typically 0.006%), silicon (≤ 0.03 max, typically 0.002%), and tin (≤ 0.03 max, typically 0.002%). Other trace elements not frequently identified, may include antimony, arsenic, cadmium, cobalt, lead, and zirconium.
- Percentages are expressed as typical ranges or maximum concentrations of trace elements for the purpose of communicating the potential hazards of the finished product. Consult product specifications for specific composition information.
- Product surfaces may be treated with small amounts of corrosion-inhibiting oil that may contain mineral oil or petroleum distillates, or paints, epoxies, laminates, etc., generally applied at the customer's request. Refer to the coating manufacturer's SDS for hazards associated with coatings. Refer to the following table for additional information.

A. There is no requirement for some A653 designations, but the analysis shall be reported on Mill Certificate.

B. Composition %'s shown here are the maximum of the specification designations and may be less when shown on a Mill Certificate heat analysis. No minimums are listed in A653.

Base Metal Coating (if applicable)¹

Chemical Name	CAS Number	EC Number	% weight ²
Galvanized (Per ASTM A653) ³			
Zinc	7440-66-6	231-175-3	99.0-100
Aluminum	7429-90-5	231-072-3	0.25-1.00

Other Coatings (if applicable)¹ <0.8 total

Chemical Name	CAS Number	EC Number	% weight ² /Coating Weight
Chem Treat – Chromium (VI)	18540-29-9	606-053-1	0.3-12 MG/FT2

1. Refer to product specifications for coating applicability.

2. Percentages are expressed as typical ranges or maximum concentrations of trace elements in the coating, for the purpose of communicating the potential hazards of the finished product. Consult product specifications for specific composition information.

3. Per ASTM A653, Section 6.2, Zinc Bath Analysis, the bath metal used in continuous hot-dip galvanizing shall contain not less than 99 % zinc. To control alloy formation and promote adhesion of the zinc coating with the steel base metal, the molten coating metal composition normally contains a percentage of aluminum. Specification B852 specifies continuous galvanizing grade (CGG) zinc alloys, including multiple zinc alloys.

Section 4 – First-aid Measures

4(a) Description of necessary measures:

- Inhalation: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
- Eye Contact: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical advice attention. If exposed, concerned or feel unwell: Get medical advice/attention.
- Skin Contact:** If on skin: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. If exposed, concerned or feel unwell: Get medical advice/attention.
- Ingestion: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most important symptoms/effects, acute and delayed (chronic):

- **Inhalation: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.

However, during further processing (welding, grinding, burning, etc.) individual components may illicit an acute or chronic health effect. Refer to Section 11-Toxicological Information.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not Applicable for **Coated Steel Sheet** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards arising from the chemical: Not Applicable for **Coated Steel Sheet** as sold/shipped. When burned, toxic smoke, fume and vapor may be emitted.

5(c) Special protective equipment and precautions for fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not Applicable for **Coated Steel Sheet** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and materials for containment and clean up: Not Applicable for **Coated Steel Sheet** as sold/shipped. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for safe handling: Not Applicable for **Coated Steel Sheet** as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in well ventilated areas. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product. Cut resistant gloves and sleeves should be worn when working with steel products.

7(b) Conditions for safe storage, including any incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): **Coated Steel Sheet** as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates. The following exposure limits are offered as reference for an experienced industrial hygienist to review.

Ingredients	OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Iron	10 mg/m ³ (as iron oxide fume)	5.0 mg/m ³ (as iron oxide dust and fume)	5.0 mg/m ³ (as iron oxide dust and fume)	2,500 mg Fe/m ³
Manganese	(C) 5.0 mg/m ³ (as Fume & Mn compounds)	0.2 mg/m ³	(C) 5.0 mg/m ³ 1.0 mg/m ³ (as fume) (STEL) 3.0 mg/m ³	500 mg Mn/m ³
Nickel	1.0 mg/m ³ (as Ni metal & insoluble compounds)	1.5 mg/m ³ (as inhalable fraction ⁵ Ni metal) 0.2 mg/m ³ (as inhalable fraction Ni inorganic only insoluble and soluble compounds)	0.015 mg/m ³ (as Ni metal & insoluble and soluble compounds)	10 mg/m ³ (as Ni)
Silicon	15 mg/m ³ (total dust, PNOR ⁶) 5.0 mg/m ³ (as respirable fraction, PNOR)	10 mg/m ³	10 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable dust)	NE

8(a) Occupational Exposure Limits (OELs) (continued):

NE - None Established

1. OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (C) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Peak is defined as the acceptable maximum peak for a maximum duration above the ceiling concentration for an eight-hour shift. A skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.

2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures. A "skin" notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. ACGIH-TLVs are only recommended guidelines based upon consensus agreement of the membership of the ACGIH. As such, the ACGIH TLVs are for guideline use purposes and are not legal regulatory standards for compliance purposes. The TLVs are designed for use by individuals trained in the discipline of industrial hygiene relative to the evaluation of exposure to various chemical or biological substances and physical agents that may be found in the workplace.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid- 1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994.
5. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2013 TLVs ® and BEIs ® (Biological Exposure Indices) Appendix D, paragraph A.
6. PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by a limit which is the same as the inert or nuisance dust limit of 15 mg/m³ for total dust and 5 mg/m³ for the respirable fraction.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.

- **Eyes:** Wear appropriate eye protection to prevent eye contact. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin:** Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Solid, Metallic Gray

9(b) Odor: Odorless

9(c) Odor Threshold: NA

9(d) pH: NA

9(e) Melting Point/Freezing Point: ~2750 °F (~1510 C)

9(f) Initial Boiling Point and Boiling Range: ND

9(g) Flash Point: NA

9(h) Evaporation Rate: NA

9(i) Flammability (solid, gas): Non-flammable, non-combustible

NA - Not Applicable

ND - Not Determined for product as a whole

9(j) Upper/lower Flammability or Explosive Limits: NA

9(k) Vapor Pressure: NA

9(l) Vapor Density (Air = 1): NA

9(m) Relative Density: 7.85

9(n) Solubility(ies): Insoluble

9(o) Partition Coefficient n-octanol/water: ND

9(p) Auto-ignition Temperature: NA

9(q) Decomposition Temperature: ND

9(r) Viscosity: NA

Section 10 - Stability and Reactivity

10(a) Reactivity: Not Determined (ND) for product in a solid form. Do not use water on molten metal.

10(b) Chemical Stability: Steel products are stable under normal storage and handling conditions.

10(c) Possibility of hazardous reaction: None Known

10(d) Conditions to Avoid: Storage with strong acids or calcium hypochlorite

10(e) Incompatible Materials: Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

10(f) Hazardous Decomposition Products: Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11 Information on toxicological effects: The following toxicity data has been determined for **Coated Steel Sheet** when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Acute Toxicity Hazard (covers Categories 1-4)	NA*	4 ^a		Warning	Harmful if swallowed.
Eye Damage/Irritation (covers Categories 1, 2A and 2B)	NA*	2B ^c	No Pictogram	Warning	Causes eye irritation.
Skin/Dermal Sensitization (covers Category 1)	NA*	1 ^d		Warning	May cause an allergic skin reaction.
Carcinogenicity (covers Categories 1A, 1B and 2)	NA*	2 ^g		Warning	Suspected of causing cancer.
Toxic Reproduction (covers Categories 1A, 1B and 2)	NA*	2 ^h		Warning	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	NA*	3 ⁱ		Warning	May cause respiratory irritation.
STOT following Repeated Exposure (covers Categories 1 and 2)	NA*	1 ^j		Danger	Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.

* Not Applicable - Semi-formed steel products are considered articles under Reach regulation (REACH REGULATION (EC) No 1907/2006) and are not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008).

Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC₅₀ or LD₅₀ has been established for **Coated Steel Sheet**. The following data has been determined for the components:

- **Iron:** Rat LD₅₀ =98.6 g/kg (REACH)
Rat LD₅₀ =1060 mg/kg (IUCLID)
Rat LD₅₀ =984 mg/kg (IUCLID)
Rabbit LD₅₀ =890 mg/kg (IUCLID)
Guinea Pig LD₅₀ =20 g/kg (TOXNET)
- **Nickel:** LD₅₀ >9000 mg/kg (Oral/Rat)
- **Silicon:** LD₅₀ = 3160 mg/kg (Oral/Rat)
- **Manganese:** Rat LD₅₀ > 2000 mg/kg (REACH)
Rat LD₅₀ > 9000 mg/kg (NLM Toxnet)

b. No Skin (Dermal) Irritation data available for **Coated Steel Sheet** as a mixture or its components.

c. No Eye Irritation data available for **Coated Steel Sheet** as a mixture. The following Eye Irritation information was found for the components:

- **Iron:** Causes eye irritation.
- **Silicon:** Slight eye irritation in rabbit protocol
- **Nickel:** Slight eye irritation from particulate abrasion only.

d. No Skin (Dermal) Sensitization data available **Coated Steel Sheet** as a mixture. The following Skin (Dermal) Sensitization information was found for the components:

- **Nickel:** May cause allergic skin sensitization.

e. No Respiratory Sensitization data available for **Coated Steel Sheet** as a mixture or its components.

f. No Germ Cell Mutagenicity data available for **Coated Steel Sheet** as a mixture. The following Mutagenicity and Genotoxicity information was found for the components:

- **Iron:** IUCLID has found some positive and negative findings in vitro.

- **Nickel:** EU RAR has found positive results in vitro and in vivo but insufficient data for classification.
- g. Carcinogenicity: IARC, NTP, and OSHA do not list **Coated Steel Sheet** as carcinogens. The following Carcinogenicity information was found for the components:
- **Welding Fumes** - IARC Group 2B carcinogen, a mixture that is possibly carcinogenic to humans.
 - **Chromium (as metal and trivalent chromium compounds)** – IARC Group 3 carcinogens, not classifiable as to their human carcinogenicity.
 - **Nickel and certain nickel compounds** – Group 2B - metallic nickel Group 1 - nickel compounds ACGIH confirmed human carcinogen. Nickel – EURAR Insufficient evidence to conclude carcinogenic potential in animals or humans; suspect carcinogen classification Category 2 Suspected of causing cancer.
- h. No Toxic Reproduction data available for **Coated Steel Sheet** as a mixture. The following Toxic Reproductive information was found for the components:
- **Nickel:** Effects on fertility.
- i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Coated Steel Sheet** as a mixture. The following STOT following a Single Exposure data was found for the components:
- **Iron:** Irritating to Respiratory tract.
- j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Coated Steel Sheet** as a whole. The following STOT following Repeated Exposure data was found for the components:
- **Manganese:** Inhalation of metal fumes - Degenerative changes in human Brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.*, 1966).
 - **Nickel:** Rat 4 wk inhalation LOEL 4 mg/m³ Lung and Lymph node histopathology. Rat 2 yr inhalation LOEL 0.1 mg/ m³ Pigment in kidney, effects on hematopoiesis spleen and bone marrow and adrenal tumor. Rat 13 Week Inhalation LOAEC 1.0 mg/m³ Lung weights, and Alveolar histopathology.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2009, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects:

- **Inhalation:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract. Excessive inhalation of fumes of freshly formed metal oxide particles sized below 1.5 micrometer and usually between 0.02-0.05 micrometers from many metals can produce an acute reaction known as “metal fume fever”. Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), metallic taste in the mouth, dryness and irritation of the throat followed by weakness and muscle pain. The symptoms come on in a few hours after excessive exposures and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted. Freshly formed oxide fumes of manganese have been associated with causing metal fume fever.
- **Eye:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes.
- **Skin:** Skin contact with metal dusts may cause irritation or sensitization, possibly leading to dermatitis. Skin contact with metallic fumes and dusts may cause physical abrasion.
- **Ingestion:** Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of metal dust may cause nausea or vomiting.

Acute Effects by component:

- **Iron and iron oxides:** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage. Particles of iron or iron compounds, which become imbedded in the eye, may cause rust stains unless removed fairly promptly.
- **Manganese and manganese oxides:** Manganese and Manganese oxide are harmful if swallowed.
- **Nickel and nickel oxides:** Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin.
- **Silicon and silicon oxides:** May be harmful if swallowed.

Delayed (chronic) Effects by component:

- **Iron and iron oxides:** Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by the International Agency for Research on Cancer (IARC).
- **Manganese and manganese oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to manganese oxides include: speed and coordination of motor function are especially impaired.
- **Nickel and nickel oxides:** Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer in humans. Nickel causes damage to lungs through prolonged or repeated inhalation exposure. IARC lists nickel and certain nickel compounds as Group 2B carcinogens (sufficient animal data). ACGIH 2013 TLVs® and BEIs® lists insoluble nickel compounds as confirmed human carcinogens. Nickel is suspected of damaging the unborn child.

- **Silicon and silicon oxides:** Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust. Eye contact with pure material can cause particulate irritation. Skin contact with silicon dusts may cause physical abrasion.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Coated Steel Sheet** as sold/shipped. However, individual components of the product when processed have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide:** LC₅₀: >1000 mg/L; Fish 48 h-EC₅₀ > 100 mg/L (Currenta, 2008k); 96 h-LC₀ ≥ 50,000 mg/L Test substance: Bayferrox 130 red (95 – 97% Fe₂O₃; < 4% SiO₂ and Al₂O₃) (Bayer, 1989a)
- **Hexavalent Chrome:** EU RAR listed as category 1, found acute EC₅₀ and LD₅₀ to algae and invertebrates < 1 mg.
- **Nickel Oxide:** IUCLID found LC₅₀ in fish, invertebrates and algae > 100 mg/l.

12(b) Persistence & Degradability: No Data Available for **Coated Steel Sheet** as sold/shipped or individual components.

12(c) Bioaccumulative Potential: No Data Available for **Coated Steel Sheet** as sold/shipped or individual components.

12(d) Mobility (in soil): No data available for **Coated Steel Sheet** as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Not Reported

Signal Word: No Signal Word

Hazard Symbol: No Symbol

Hazard Statement: No Statement

Section 13 - Disposal Considerations

Disposal: Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03-04 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Coated Steel Sheet in its original form. Any alterations can void this information.

Section 14 - Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 **does not** regulate **Coated Steel Sheet** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: Not Applicable (NA)

Shipping Symbols: NA

Hazard Class: NA

UN No.: NA

Packing Group: NA

DOT/IMO Label: NA

Special Provisions (172.102): NA

Packaging Authorizations

a) **Exceptions:** NA

b) **Group:** NA

Authorization: NA

Quantity Limitations

a) **Passenger, Aircraft, or Railcar:** NA

b) **Cargo Aircraft Only:** NA

Vessel Stowage Requirements

a) **Vessel Stowage:** NA

b) **Other:** NA

DOT Reportable Quantities: NA

International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Coated Steel Sheet** as a hazardous material.

Shipping Name: Not Applicable (NA)

Classification Code: NA

UN No.: NA

Packing Group: NA

ADR Label: NA

Special Provisions: NA

Limited Quantities: NA

Packaging

a) **Packing Instructions:** NA

b) **Special Packing Provisions:** NA

Mixed Packing Provisions: NA

Portable Tanks & Bulk Containers

a) **Instructions:** NA

Special Provisions: NA

International Air Transport Association (IATA) does not regulate **Coated Steel Sheet** as a hazardous material.

Shipping Name: Not Applicable (NA)

Class/Division: NA Hazard Label (s):

NA UN No.: NA

Packing Group: NA

Excepted Quantities (EQ): NA

Passenger & Cargo Aircraft Limited Quantity (EQ)

Pkg Inst: NA

Pkg Inst: NA

Max Net Qty/Pkg: NA

Max Net Qty/Pkg: NA

Cargo Aircraft Only Pkg

Inst: NA

Max Net Qty/Pkg: NA

Special Provisions:

NA

ERG Code: NA

Pkg Inst – Packing Instructions

Max Net Qty/Pkg – Maximum Net Quantity per Package

ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) Classification: Coated Steel Sheet does not have a TDG classification.

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to a ClarkDietrich product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.*

This product and/or its constituents are subject to the following regulations:

OSHA Regulations: Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): The product, **Coated Steel Sheet** as a whole is not listed. However, individual components of the product are listed: Refer to Section 8, Exposure Controls and Personal Protection

EPA Regulations: The product, **Coated Steel Sheet** is not listed as a whole. However, individual components of the product are listed:

Components	Regulations
Manganese	CAA, SARA 313, SDWA
Nickel	CAA, CERCLA, CWA, SARA 313

SARA 311/312 Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Regulations Key:

- CAA Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 [As of: 8/18/06])
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14), 9603(a); 40 CFR Sec. 302.4, Table 302.4, Table 302.4 and App. A)
- CWA Clean Water Act (33 USC Secs. 1311; 1314(b), (c), (e), (g); 136(b), (c); 137(b), (c) [as of 8/2/06])
- RCRA Resource Conservation Recovery Act (42 USC Sec. 6921; 40 CFR Part 261 App VIII)
- SARA Superfund Amendments and Reauthorization Act of 1986 Title III Section 302 Extremely Hazardous Substances (42 USC Secs. 11023, 13106; 40 CFR sec. 372.65) and Section 313 Toxic Chemicals (42 USC Secs. 11023, 13106; 40 CFR Sec. 372.65 [as of 6/30/05])
- TSCA Toxic Substance Control Act (15 U.S.C. s/s 2601 et seq. [1976])
- SDWA Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. [1974])

Section 313 Supplier Notification: The product, **Coated Steel Sheet** contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
7439-96-5	Manganese	2.0 max
7440-02-0	Nickel	0.5 max

State Regulations: The product, **Coated Steel Sheet** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

Pennsylvania Right to Know: Contains regulated material in the following categories:

- Hazardous Substances: Manganese and Silicon
- Environmental Hazards: Manganese and Nickel
- Special Hazardous Substance: Nickel

California Prop. 65: Contains elements known to the State of California to cause cancer or reproductive toxicity. This includes nickel, chromium (VI), and not intentionally added trace amounts arsenic, cadmium, cobalt and lead.

New Jersey: Contains regulated material in the following categories:

- Hazardous Substance: Manganese, and Nickel

Minnesota: Manganese, Nickel and Silicon Massachusetts: Manganese and Nickel

Other Regulations:

WHMIS Classification (Canadian): The product, **Coated Steel Sheet** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Iron	B4, D2B
Manganese	B4, D2A
Nickel	D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: ClarkDietrich
Original Issue Date: 05/01/2015

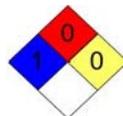
Revised Date: 10-13-2025

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

National Fire Protection Association (NFPA)



HEALTH= 1, Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn

PHYSICAL HAZARD= 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FLAMMABILITY = 0, Materials that will not burn

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists		NIF	No Information Found
BEIs	Biological Exposure Indices		NIOSH	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service		NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act		ORC	Organization Resources Counselors
CFR	Code of Federal Regulations		OSHA	Occupational Safety and Health Administration
CNS	Central Nervous System		PEL	Permissible Exposure Limit
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract		PNOR	Particulate Not Otherwise Regulated
HMIS	Hazardous Materials Identification System		PNOC	Particulate Not Otherwise Classified
IARC	International Agency for Research on Cancer		PPE	Personal Protective Equipment
LC50	Median Lethal Concentration		ppm	parts per million
LD50	Median Lethal Dose		RCRA	Resource Conservation and Recovery Act
LD_{Lo}	Lowest Dose to have killed animals or humans		RTECS	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit		SARA	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level		SCBA	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration		SDS	Safety Data Sheet
µg/m³	microgram per cubic meter of air		STEL	Short-term Exposure Limit
mg/m³	milligram per cubic meter of air		TLV	Threshold Limit Value
mppcf	million particles per cubic foot		TWA	Time-weighted Average
MSHA	Mine Safety and Health Administration		UEL	Upper Explosive Limit
NFPA	National Fire Protection Association			

Disclaimer: This information is taken from sources or based upon data believed to be reliable. Our objective in sending this information is to help you protect the health and safety of your personnel and to comply with the OSHA Hazard Communication Standard and Title III of the Emergency Planning and Community Right-to-Know Act. ClarkDietrich Building makes no warranty as to the absolute correctness, completeness, or sufficiency of any of the foregoing, or any additional, or other measures that may not be required under particular conditions.

Section 1 – Identification

1(a) Product Identifier used on Label: Coated Steel Sheet.

1(b) Use/Description: Coated Steel Sheet for thin gauge framing products.

1(d) Products: Cold-Formed Steel Framing components and accessories for drywall, curtain wall and load bearing systems.

1(d) Synonyms: Hot Band, Cold Rolled, P&O, Galvanized.

1(e) Company Identification and Emergency Contact Information: Telling Industries, LLC buildstrong.com

Corporate Office:

4420 Sherwin Rd.

Phone: 440-974-3370

Email: sales.corp@tellingindustries.com

Willoughby, OH 44094

Manufacturing Locations:

Cambridge, OH

Osceola, AR

Windsor, CT

Plant City, FL

Section 2 – Hazard(s) Identification

2(a) Classification of the chemical: Coated Steel Sheet is considered an article under Reach regulation (REACH REGULATION (EC) No 1907/2006) and is not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008). However, Coated Steel Sheet is not exempt as an article under OSHA's Hazard Communication Standard (29 CFR 1910.1200) due to its downstream use, thus this product is considered a mixture and a hazardous material. Therefore, the categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev.3" United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information.

2(b) Signal word, hazard statement(s), symbols and precautionary statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Carcinogenicity – 1b Reproductive Toxicity - 2 Single Target Organ Toxicity (STOT) Repeat Exposure -1	Danger	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure. Harmful if swallowed. May cause an allergic skin reaction. Harmful in contact with skin. May cause respiratory irritation. Causes eye irritation.
	Acute Toxicity-Oral - 4 Skin Sensitization - 1 STOT Single Exposure - 3		
NA	Eye Irritation-2B		

Precautionary Statement(s):

Prevention	Response	Storage/Disposal
Do not breathe dusts / fume / gas / mist / vapor / spray. Wear protective gloves / protective clothing / eye protection / face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in well-ventilated areas. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.	If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. Call a poison center/doctor if you feel unwell.	Dispose of contents in accordance with federal, state and local regulations.

2(c) Hazards not otherwise classified: None Known

2(d) Unknown acute toxicity statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical name, common name (synonyms), CAS number and other identifiers, and concentration:

Chemical Name	CAS Number	EC Number	% weight
Iron	7439-89-6	231-096-4	90-99.9
Manganese	7439-96-5	231-105-1	0.5-2.0
Nickel	7440-02-0	231-111-4	0.004-0.4
Silicon	7440-21-3	231-130-8	0.001-1
Chromium	7440-47-3	231-157-5	0-1
Zinc	7440-66-6	231-175-3	100

EC - European Community

CAS - Chemical Abstract Service

- All commercial steel products contain small amounts of various elements in addition to those listed. These small quantities are frequently referred to as “trace” or “residual” elements that generally originate in the raw materials used. Steel products may contain the following trace or residual elements including typical percentages for the elements identified: aluminum (0.01-0.5), boron (≤ 0.005 max, typically 0.001%), calcium (≤ 0.005 max, typically 0.0003%), carbon (0.6 max), chromium (0.7 max) columbium (≤ 0.15 max, typically 0.002%), copper (0.4 max) molybdenum (≤ 0.4 max, typically 0.006%), phosphorous (≤ 0.1 max, typically 0.01%), sulfur (≤ 0.04 max, typically, 0.007%), tin (≤ 0.03 max, typically 0.002%), titanium (≤ 0.15 max, typically 0.002%), and vanadium (≤ 0.15 max, typically 0.001%). Other trace elements not frequently identified, may include antimony, arsenic, cadmium, cobalt, lead, and zirconium.
- Percentages are expressed as typical ranges or maximum concentrations of trace elements for the purpose of communicating the potential hazards of the finished product. Consult product specifications for specific composition information.
- Product surfaces may be treated with small amounts of corrosion-inhibiting oil that may contain mineral oil or petroleum distillates, or paints, epoxies, laminates, etc., generally applied at the customer's request. Refer to the coating manufacturer's MSDS for hazards associated with coatings. Refer to the following table for additional information.

Base Metal Coating (if applicable)¹

Chemical Name	CAS Number	EC Number	% weight ²
Aluminum	7429-90-5	231-072-3	0 - 85
Nickel (Ni) ZnNi EG	7440-02-0	231-111-4	10 - 30
Galvalume ³	Mixture	Mixture	98 min
Zinc Galvanize (GI) Galvanneal (GA) ZnNi EG	7440-66-6	231-175-3	(GI) 99 min. (GA) 85 min. ⁴ (ZnNi) 70-90

Other Coatings (if applicable)¹ <0.8 total

Chemical Name	CAS Number	EC Number	% weight ²
Barium Chromate	10-2944-03	231-157-5	10
Chem Phos 2007	Varies ⁵	Varies	0.004 – 0.017 ⁶
Chem Treat – Chrome	7440-47-3	231-157-5	0.3-12 MG/FT2
Epoxy Resin	Varies	Varies	40 - 60
Phosphate Treat	7664-38-2	231-633-2	100-200MG/FT2
Silicates	Varies	Varies	3 -30
Zinc Potassium Chromate	11103-86-9	234-329-8	1

- Refer to product specifications for coating applicability.
- Percentages are expressed as typical ranges or maximum concentrations of trace elements in the coating, for the purpose of communicating the potential hazards of the finished product. Consult product specifications for specific composition information.
- Galvalume coated steel is steel that is plated on one or both sides with a 55% Aluminum, min. 40% Zinc Alloy coating. The balance is a mixture of silicon and potentially the trace elements found in steel products. See Section 2 Notes.
- In addition to trace elements, as stated in Section 2 Notes, the balance of the Galvanneal coating is alloyed Iron from the base metal.
- The coating consists of a mixture of crystalline and amorphous forms of Phosphophyllite and Hopeite.
- Percentages listed are calculated from typical coating weights of 0.3-0.8 g/m³ and substrate thicknesses of 0.6 – 1.1 mm (4.67 – 8.57 kg/m²)

Section 4 – First-aid Measures

4(a) Description of necessary measures:

- **Inhalation: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However during further processing (welding, grinding, burning, etc.), if inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Eye Contact: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However during further processing (welding, grinding, burning, etc.), if in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical advice attention. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Skin Contact:** If on skin: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Ingestion: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However during further processing (welding, grinding, burning, etc.), if swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most important symptoms/effects, acute and delayed (chronic):

- **Inhalation: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic health effect.

However during further processing (welding, grinding, burning, etc.) individual components may illicit an acute or chronic health effect. Refer to Section 11-Toxicological Information.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not Applicable for **Coated Steel Sheet** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards arising from the chemical: Not Applicable for **Coated Steel Sheet** as sold/shipped. When burned, toxic smoke, fume and vapor may be emitted.

5(c) Special protective equipment and precautions for fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not Applicable for **Coated Steel Sheet** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and materials for containment and clean up: Not Applicable for **Coated Steel Sheet** as sold/shipped. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for safe handling: Not Applicable for **Coated Steel Sheet** as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in well ventilated areas. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product. Cut resistant gloves and sleeves should be worn when working with steel products.

7(b) Conditions for safe storage, including any incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): **Coated Steel Sheet** as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates. The following exposure limits are offered as reference for an experienced industrial hygienist to review.

				IDLH ⁴
Iron	10 mg/m ³ (as iron oxide fume)	5.0 mg/m ³ (as iron oxide dust and fume)	5.0 mg/m ³ (as iron oxide dust and fume)	2,500 mg Fe/m ³
Manganese	(C) 5.0 mg/m ³ (as Fume & Mn compounds)	0.2 mg/m ³	(C) 5.0 mg/m ³ 1.0 mg/m ³ (as fume) (STEL) 3.0 mg/m ³	500 mg Mn/m ³

Nickel	1.0 mg/m ³ (as Ni metal & insoluble compounds)	1.5 mg/m ³ (as inhalable fraction ² Ni metal) 0.2 mg/m ³ (as inhalable fraction Ni inorganic only insoluble and soluble compounds)	0.015 mg/m ³ (as Ni metal & insoluble and soluble compounds)	10 mg/m ³ (as Ni)
Silicon	15 mg/m ³ (total dust, PNOR ⁶) 5.0 mg/m ³ (as respirable fraction, PNOR)	10 mg/m ³	10 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable dust)	NE
Chromium	0.5 mg/m ³ (as Cr II & III, inorganic compounds) 1.0 mg/m ³ (as Cr, metal) 0.005 mg/m ³ (as Cr VI, inorganic compounds & certain water insoluble) “AL” 0.0025 mg/m ³ (as Cr VI, inorganic compounds & certain water insoluble)	0.5 mg/m ³ (as Cr III, inorganic compounds) 0.5 mg/m ³ (as Cr, metal) 0.05 mg/m ³ (as Cr VI, inorganic compounds) 0.01 mg/m ³ (as Cr VI, inorganic compounds & certain water insoluble)	0.5 mg/m ³ (as Cr II & III, inorganic compounds) 0.5 mg/m ³ (as Cr, metal) 0.001 mg/m ³ (as Cr VI, inorganic compounds & certain water insoluble)	250 mg/m ³ (as Cr II & metal) 25 mg/m ³ (as Cr III) 15 mg/m ³ (as Cr VI)
Vanadium	“C” 0.5 mg/m ³ (respirable dust, V ₂ O ₅)	0.05 mg/m ³ (as inhalable fraction)	“C” 0.05 mg/m ³ (15 min)	35 mg/m ³ (as V)
Zinc	5.0 mg/m ³ (as zinc oxide fume) 15 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable fraction)	2.0 mg/m ³ (as zinc oxide)	10 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable dust)	NE

8(a) Occupational Exposure Limits (OELs) (continued):

NE - None Established

1. OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (C) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Peak is defined as the acceptable maximum peak for a maximum duration above the ceiling concentration for an eight-hour shift. A skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures. A “skin” notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. ACGIH-TLVs are only recommended guidelines based upon consensus agreement of the membership of the ACGIH. As such, the ACGIH TLVs are for guideline use purposes and are not legal regulatory standards for compliance purposes. The TLVs are designed for use by individuals trained in the discipline of industrial hygiene relative to the evaluation of exposure to various chemical or biological substances and physical agents that may be found in the workplace.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The “immediately dangerous to life or health air concentration values (IDLHs)” are used by NIOSH as part of the respirator selection criteria and were first developed in the mid- 1970’s by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994.
5. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2013 TLVs ® and BEIs ® (Biological Exposure Indices) Appendix D, paragraph A.
6. PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by a limit which is the same as the inert or nuisance dust limit of 15 mg/m³ for total dust and 5 mg/m³ for the respirable fraction.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

8(c) Individual Protection Measures”

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.

- **Eyes:** Wear appropriate eye protection to prevent eye contact. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin:** Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Solid, Metallic Gray	9(j) Upper/lower Flammability or Explosive Limits: NA
9(b) Odor: Odorless	9(k) Vapor Pressure: NA
9(c) Odor Threshold: NA	9(l) Vapor Density (Air = 1): NA
9(d) pH: NA	9(m) Relative Density: 7.85
9(e) Melting Point/Freezing Point: ~2750 °F (~1510 C)	9(n) Solubility(ies): Insoluble
9(f) Initial Boiling Point and Boiling Range: ND	9(o) Partition Coefficient n-octanol/water: ND
9(g) Flash Point: NA	9(p) Auto-ignition Temperature: NA
9(h) Evaporation Rate: NA	9(q) Decomposition Temperature: ND
9(i) Flammability (solid, gas): Non-flammable, non-combustible	9(r) Viscosity: NA

NA - Not Applicable
ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

- 10(a) Reactivity:** Not Determined (ND) for product in a solid form. Do not use water on molten metal.
- 10(b) Chemical Stability:** Steel products are stable under normal storage and handling conditions.
- 10(c) Possibility of hazardous reaction:** None Known
- 10(d) Conditions to Avoid:** Storage with strong acids or calcium hypochlorite
- 10(e) Incompatible Materials:** Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.
- 10(f) Hazardous Decomposition Products:** Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11 Information on toxicological effects: The following toxicity data has been determined for **Coated Steel Sheet** when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Acute Toxicity Hazard (covers Categories 1-4)	NA*	4 ^a		Warning	Harmful if swallowed.
Eye Damage/ Irritation (covers Categories 1, 2A and 2B)	NA*	2B ^c	No Pictogram	Warning	Causes eye irritation.
Skin/Dermal Sensitization (covers Category 1)	NA*	1 ^d		Warning	May cause an allergic skin reaction.
Carcinogenicity (covers Categories 1A, 1B and 2)	NA*	2 ^g		Warning	Suspected of causing cancer.
Toxic Reproduction (covers Categories 1A, 1B and 2)	NA*	2 ^h		Warning	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	NA*	3 ⁱ		Warning	May cause respiratory irritation.
STOT following Repeated Exposure (covers Categories 1 and 2)	NA*	1 ^j		Danger	Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.

* Not Applicable - Semi-formed steel products are considered articles under Reach regulation (REACH REGULATION (EC) No 1907/2006) and are not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008).

Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC₅₀ or LD₅₀ has been established for **Coated Steel Sheet**. The following data has been determined for the components:

- **Iron:** Rat LD₅₀ =98.6 g/kg (REACH)
Rat LD₅₀ =1060 mg/kg (IUCLID)
Rat LD₅₀ =984 mg/kg (IUCLID)
Rabbit LD₅₀ =890 mg/kg (IUCLID)
Guinea Pig LD₅₀ =20 g/kg (TOXNET)
- **Nickel:** LD₅₀ >9000 mg/kg (Oral/Rat)
- **Silicon:** LD₅₀ = 3160 mg/kg (Oral/Rat)
- **Manganese:** Rat LD₅₀ > 2000 mg/kg (REACH)
Rat LD₅₀ > 9000 mg/kg (NLM Toxnet)

b. No Skin (Dermal) Irritation data available for **Coated Steel Sheet** as a mixture or its components.

c. No Eye Irritation data available for **Coated Steel Sheet** as a mixture. The following Eye Irritation information was found for the components:

- **Iron:** Causes eye irritation.
- **Silicon:** Slight eye irritation in rabbit protocol
- **Nickel:** Slight eye irritation from particulate abrasion only.

d. No Skin (Dermal) Sensitization data available **Coated Steel Sheet** as a mixture. The following Skin (Dermal) Sensitization information was found for the components:

- **Nickel:** May cause allergic skin sensitization.

e. No Respiratory Sensitization data available for **Coated Steel Sheet** as a mixture or its components.

f. No Germ Cell Mutagenicity data available for **Coated Steel Sheet** as a mixture. The following Mutagenicity and Genotoxicity information was found for the components:

- **Iron:** IUCLID has found some positive and negative findings in vitro.
- **Nickel:** EU RAR has found positive results in vitro and in vivo but insufficient data for classification.

g. Carcinogenicity: IARC, NTP, and OSHA do not list **Coated Steel Sheet** as carcinogens. The following Carcinogenicity information was found for the components:

- **Welding Fumes** - IARC Group 2B carcinogen, a mixture that is possibly carcinogenic to humans.
- **Chromium (as metal and trivalent chromium compounds)** – IARC Group 3 carcinogens, not classifiable as to their human carcinogenicity.
- **Nickel and certain nickel compounds** – Group 2B - metallic nickel Group 1 - nickel compounds ACGIH confirmed human carcinogen. Nickel – EURAR Insufficient evidence to conclude carcinogenic potential in animals or humans; suspect carcinogen classification Category 2 Suspected of causing cancer.

- h. No Toxic Reproduction data available for **Coated Steel Sheet** as a mixture. The following Toxic Reproductive information was found for the components:
- **Nickel:** Effects on fertility.
- i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Coated Steel Sheet** as a mixture. The following STOT following a Single Exposure data was found for the components:
- **Iron:** Irritating to Respiratory tract.
- j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Coated Steel Sheet** as a whole. The following STOT following Repeated Exposure data was found for the components:
- **Manganese:** Inhalation of metal fumes - Degenerative changes in human Brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.*, 1966).
 - **Nickel:** Rat 4 wk inhalation LOEL 4 mg/m³ Lung and Lymph node histopathology. Rat 2 yr inhalation LOEL 0.1 mg/ m³ Pigment in kidney, effects on hematopoiesis spleen and bone marrow and adrenal tumor. Rat 13 Week Inhalation LOAEC 1.0 mg/m³ Lung weights, and Alveolar histopathology.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2009, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects:

- **Inhalation:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract. Excessive inhalation of fumes of freshly formed metal oxide particles sized below 1.5 micrometer and usually between 0.02-0.05 micrometers from many metals can produce an acute reaction known as “metal fume fever”. Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), metallic taste in the mouth, dryness and irritation of the throat followed by weakness and muscle pain. The symptoms come on in a few hours after excessive exposures and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted. Freshly formed oxide fumes of manganese have been associated with causing metal fume fever.
- **Eye:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes.
- **Skin:** Skin contact with metal dusts may cause irritation or sensitization, possibly leading to dermatitis. Skin contact with metallic fumes and dusts may cause physical abrasion.
- **Ingestion:** Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of metal dust may cause nausea or vomiting.

Acute Effects by component:

- **Iron and iron oxides:** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage. Particles of iron or iron compounds, which become imbedded in the eye, may cause rust stains unless removed fairly promptly.
- **Manganese and manganese oxides:** Manganese and Manganese oxide are harmful if swallowed.
- **Nickel and nickel oxides:** Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin.
- **Silicon and silicon oxides:** May be harmful if swallowed.

Delayed (chronic) Effects by component:

- **Iron and iron oxides:** Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by the International Agency for Research on Cancer (IARC).
- **Manganese and manganese oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to manganese oxides include: speed and coordination of motor function are especially impaired.
- **Nickel and nickel oxides:** Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer in humans. Nickel causes damage to lungs through prolonged or repeated inhalation exposure. IARC lists nickel and certain nickel compounds as Group 2B carcinogens (sufficient animal data). ACGIH 2013 TLVs® and BEIs® lists insoluble nickel compounds as confirmed human carcinogens. Nickel is suspected of damaging the unborn child.
- **Silicon and silicon oxides:** Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust. Eye contact with pure material can cause particulate irritation. Skin contact with silicon dusts may cause physical abrasion.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Coated Steel Sheet** as sold/shipped. However, individual components of the product when processed have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide:** LC₅₀: >1000 mg/L; Fish 48 h-EC₅₀ > 100 mg/L (Currenta, 2008k); 96 h-LC₀ ≥ 50,000 mg/L Test substance: Bayferrox 130 red (95 – 97% Fe₂O₃; < 4% SiO₂ and Al₂O₃) (Bayer, 1989a)
- **Hexavalent Chrome:** EU RAR listed as category 1, found acute EC₅₀ and LD₅₀ to algae and invertebrates < 1 mg.
- **Nickel Oxide:** IUCLID found LC₅₀ in fish, invertebrates and algae > 100 mg/l.

12(b) Persistence & Degradability: No Data Available for **Coated Steel Sheet** as sold/shipped or individual components.

12(c) Bioaccumulative Potential: No Data Available for **Coated Steel Sheet** as sold/shipped or individual components.

12(d) Mobility (in soil): No data available for **Coated Steel Sheet** as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Category 1

Signal Word: Warning



Hazard Symbol:

Hazard Statement: Toxic to aquatic life

Section 13 - Disposal Considerations

Disposal: Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03-04 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Coated Steel Sheet in its original form. Any alterations can void this information.

Section 14 - Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 **does not** regulate **Coated Steel Sheet** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: Not Applicable (NA) Shipping Symbols: NA Hazard Class: NA UN No.: NA Packing Group: NA DOT/IMO Label: NA Special Provisions (172.102): NA	Packaging Authorizations a) Exceptions: NA b) Group: NA Authorization: NA	Quantity Limitations a) Passenger, Aircraft, or Railcar: NA b) Cargo Aircraft Only: NA Vessel Stowage Requirements a) Vessel Stowage: NA b) Other: NA DOT Reportable Quantities: NA
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International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Coated Steel Sheet** as a hazardous material.

Shipping Name: Not Applicable (NA) Classification Code: NA UN No.: NA Packing Group: NA ADR Label: NA Special Provisions: NA Limited Quantities: NA	Packaging a) Packing Instructions: NA b) Special Packing Provisions: NA Mixed Packing Provisions: NA	Portable Tanks & Bulk Containers a) Instructions: NA Special Provisions: NA
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International Air Transport Association (IATA) does not regulate **Coated Steel Sheet** as a hazardous material.

Shipping Name: Not Applicable (NA) Class/Division: NA Hazard Label (s): NA UN No.: NA Packing Group: NA Excepted Quantities (EQ): NA	Passenger & Cargo Aircraft Limited Quantity (EQ)		Cargo Aircraft Only Pkg Inst: NA Max Net Qty/Pkg: NA	Special Provisions: NA ERG Code: NA
	Pkg Inst: NA Max Net Qty/Pkg: NA	Pkg Inst: NA Max Net Qty/Pkg: NA		

Pkg Inst – Packing Instructions Max Net Qty/Pkg – Maximum Net Quantity per Package ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) Classification: **Coated Steel Sheet** does not have a TDG classification.

Section 15 - Regulatory Information

Regulatory Information: The following listing of regulations relating to a Telling Industries, LLC product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.

This product and/or its constituents are subject to the following regulations:

OSHA Regulations: Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): The product, **Coated Steel Sheet** as a whole is not listed. However, individual components of the product are listed: Refer to Section 8, Exposure Controls and Personal Protection

EPA Regulations: The product, **Coated Steel Sheet** is not listed as a whole. However, individual components of the product are listed:

Components	Regulations
Iron	SDWA
Manganese	CAA, SARA 313, SDWA
Nickel	CAA, CERCLA, CWA, SARA 313
Chromium	CERCLA, CWA, SARA 313, RCRA, SDWA,
Zinc compounds	CWA, SARA 313

SARA 311/312 Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Regulations Key:

- CAA Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 [As of: 8/18/06])
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14), 9603(a); 40 CFR Sec. 302.4, Table 302.4, Table 302.4 and App. A)
- CWA Clean Water Act (33 USC Secs. 1311; 1314(b), (c), (e), (g); 136(b), (c); 137(b), (c) [as of 8/2/06])
- RCRA Resource Conservation Recovery Act (42 USC Sec. 6921; 40 CFR Part 261 App VIII)
- SARA Superfund Amendments and Reauthorization Act of 1986 Title III Section 302 Extremely Hazardous Substances (42 USC Secs. 11023, 13106; 40 CFR sec. 372.65) and Section 313 Toxic Chemicals (42 USC Secs. 11023, 13106; 40 CFR Sec. 372.65 [as of 6/30/05])
- TSCA Toxic Substance Control Act (15 U.S.C. s/s 2601 et seq. [1976])
- SDWA Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. [1974])

Section 313 Supplier Notification: The product, **Coated Steel Sheet** contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act and 40 CFR part 372:

	CAS #	Chemical Name	Percent by Weight
	7439-96-5	Manganese	2.0 max
	7440-02-0	Nickel	0.4 max
	7440-47-3	Chromium	1.0 max
	7440-66-6	Zinc	<0.1 max

State Regulations: The product, **Coated Steel Sheet** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

Pennsylvania Right to Know: Contains regulated material in the following categories:

- Hazardous Substances: Manganese and Silicon
- Environmental Hazards: Manganese and Nickel
- Special Hazardous Substance: Nickel

California Prop.65:  Warning: Contains elements known to the State of California to cause cancer or reproductive toxicity.

New Jersey: Contains regulated material in the following categories:

- Hazardous Substance: Chromium, Manganese, Nickel, Silicon, Vanadium, Zinc
- Environmental Hazards: Chromium, Manganese, Nickel, Vanadium, Zinc
- Special Hazardous Substance: Chromium, Manganese, Silicon

Minnesota: Chromium, Manganese, Nickel, Zinc

Massachusetts: Chromium, Manganese (compounds), Nickel (compounds) Silicon, Vanadium, Zinc

Other Regulations:

WHMIS Classification (Canadian): The product, **Coated Steel Sheet** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Iron	B4, D2B
Manganese	Reproductive toxicity - Category 2; Specific target organ toxicity - repeated exposure - Category 1; Combustible dusts
Nickel	D2A, D2B: Skin sensitization- Category 1; Carcinogenicity- Category 2; Target organ toxicity- repeated exposure - Category 1
Chromium	Combustible dusts
Silicon	Flammable solids - Category 2; Combustible dusts

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: Telling Industries, LLC

Original Issue Date: 05/01/2015

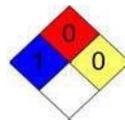
Revised Date: 05/16/2024

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

National Fire Protection Association (NFPA)



HEALTH= 1, Denotes possible chronic hazard if airborne dusts or fumes are generated. Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn

PHYSICAL HAZARD= 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FLAMMABILITY = 0, Materials that will not burn

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	NIF	No Information Found
BEIs	Biological Exposure Indices	NIOSH	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service	NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ORC	Organization Resources Counselors
CFR	Code of Federal Regulations	OSHA	Occupational Safety and Health Administration
CNS	Central Nervous System	PEL	Permissible Exposure Limit
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract	PNOR	Particulate Not Otherwise Regulated
HMIS	Hazardous Materials Identification System	PNOC	Particulate Not Otherwise Classified
IARC	International Agency for Research on Cancer	PPE	Personal Protective Equipment
LC50	Median Lethal Concentration	ppm	parts per million
LD50	Median Lethal Dose	RCRA	Resource Conservation and Recovery Act
LD _{Lo}	Lowest Dose to have killed animals or humans	RTECS	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit	SARA	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level	SCBA	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration	SDS	Safety Data Sheet
µg/m ³	microgram per cubic meter of air	STEL	Short-term Exposure Limit
mg/m ³	milligram per cubic meter of air	TLV	Threshold Limit Value
mppcf	million particles per cubic foot	TWA	Time-weighted Average
MSHA	Mine Safety and Health Administration	UEL	Upper Explosive Limit
NFPA	National Fire Protection Association		

Disclaimer: This information is taken from sources or based upon data believed to be reliable. Our objective in sending this information is to help you protect the health and safety of your personnel and to comply with the OSHA Hazard Communication Standard and Title III of the Emergency Planning and Community Right-to-Know Act. Telling Industries, LLC makes no warranty as to the absolute correctness, completeness, or sufficiency of any of the foregoing, or any additional, or other measures that may not be required under particular conditions.

SAFETY DATA SHEET

Date of issue: 09/01/2019

Section 1: Identification

Trade name: GRABBER Screws, Nails and Staples
Product code: Various
Product category: Mechanical Fasteners
Manufacturer/Supplier: Grabber Construction Products, Inc. 5255 West 11000 North Highland, Utah
1-800-477-TURN www.GrabberPro.com
Emergency telephone number: 1-801-492-3880

Section 2: Hazard(s) Identification

General Information: Fastener products are deemed "Articles" and are exempt from Safety Data Sheet (SDS) requirements under the Hazard Communication Standard – 29 CFR 1910.1200(b)(6)(v) – see below. **ARTICLE:** For the purpose of hazard communication, fastener products are "Articles" as defined in 29 CFR 1910.1200(c): Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

As "Articles," neither a Safety Data Sheet (SDS) nor a GHS-Compliant label is required for these products. This SDS is provided to our customers as a voluntarily-offered resource of limited information to promote safe handling and proper use of our products; and as a courtesy and service.

Classification(s): Under normal-use conditions, our mechanical fastener products are not expected to pose any health or safety hazards and does not meet the criteria for GHS Classification. However, unlikely conditions of welding, grinding, brazing, cutting, etc. may create dust and Particulate-Matter (PM) pollution that may cause health hazards. Improper use of mechanical anchors may result in safety hazards.

GHS Physical Hazard and Health Hazard Classifications: None applicable

Physical Hazards Not Otherwise Classified: None

Health Hazards Not Otherwise Classified: None

Symbol(s):



Signal Word(s): WARNING! (see Sections 11 and 15)

Hazard Statement(s): see Sections 11 and 15

Precautionary Statement(s): Prop 65 WARNING Label as specified in Section 15

Section 3: Composition/information on ingredients

This product is composed of various metals, and may have ferrous or non-ferrous plating

Section 4: First-Aid Measures

General Information: Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Exposure Risk: Routes of Exposure

Irritant effects: Symptoms include itching, burning, redness, tearing, and blurred vision; discomfort in the chest, shortness of breath, coughing.

Eye Contact: If experiencing eye irritation due to dust, flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If you experience redness, burning, blurred vision, or swelling, consult a physician.

Skin Contact: If experiencing skin irritation, wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation occurs consult a physician.

Ingestion: Rinse mouth immediately. Do not induce vomiting. Consult a physician.

Inhalation: Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to have trouble breathing, consult a physician.

Section 5: Fire-Fighting Measures

Extinguishing Media: None Applicable

Fire and Explosion Hazards: In the form of a solid alloy, this product will not burn.

Firefighting Instructions: None Applicable

Section 6: Accidental Release

Methods and Materials: None Applicable

Personal Precautions: None Applicable

Environmental Precautions: None Applicable

Section 7: Handling and

Wear appropriate personal protective equipment. Avoid generating dust. If grinding or cutting, use work methods which minimize dust production. Avoid inhalation of dust. Ensure adequate ventilation. When using, do not eat, drink, or smoke. Wash hands thoroughly after handling.

Storage

Store in a closed container away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Protective Measure:	Wear appropriate personal protective equipment. Protective coatings are used on some mechanical anchors. Typically, this will be commercial zinc, zinc plating with chromate conversion coating, hot dipped galvanizing, ceramic plating, or mechanically galvanized plating. This information should be considered when evaluating employee personal protective equipment.
Eye Protection:	Wear goggles or safety glasses.
Hand Protection:	Gloves recommended.
Skin and Body Protection:	Wear long sleeve shirt/long pants and other clothing as required to minimize contact. In case of dust production, wear dust-proof clothing.
Respirator Protection:	Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.
General Hygiene:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Engineering Controls:	Use outdoors or ensure good ventilation when working indoors. Provide eyewash station and emergency shower.
Exposure Limits:	No exposure limits noted for ingredients.

Section 9: Physical and Chemical Properties

Physical State: Solid
Form: Solid
Color: Gray/Various Colors
Odor: None
Odor Threshold: N/A
pH: N/A
Flammability: N/A
Vapor Pressure: N/A
Solubility: N/A
Decomposition: N/A
Freezing/Melting Point: 2700°F (1500°C)

Boiling Point: N/A
Flash Point: N/A
Evaporation Rate: N/A
Specific Gravity: N/A
VOC: N/A
U/L Flammability: N/A
Vapor Density: N/A
Oil-Water Partition Coefficient: N/A
Viscosity: N/A

Section 10: Stability and Reactivity

Reactivity: Stable and non-reactive under normal conditions of use and storage.

Chemical Stability: Stable and non-reactive under normal conditions of use and storage.

Conditions to Avoid: None known.

Substances to Avoid: Strong oxidizers. Strong acids and bases.

Hazardous Reactions: Hazardous polymerization will not occur.

Decomposition Products: Carbon dioxide, carbon monoxide, oxides of nitrogen, other organic compounds.
Thermal oxidative decomposition of galvanized steel products.

Section 11: Toxicological Information

LD50 Oral and LD50 Dermal and LC50: Not applicable to this form of product

Ingredients Toxicology Data: Carbon (C), Iron (Fe), Manganese (Mn), Phosphorus (P), Sulfur (S), Nickel (Ni), Silicon (Si), Chromium (Cr), and Zinc (Zn).

Primary Route(s) of Entry: None applicable.

Eye Hazards: None applicable.

Skin Hazards: None applicable.

Ingestion Hazards: None applicable.

Inhalation Hazards: None applicable.

Symptoms Related to Overexposure: None applicable.

Delayed Effects from Long Term Overexposure: None applicable.

Carcinogenicity: Stainless Steel and Yellow Zinc coatings - Nickel and Hexavalent Chromium are known to cause cancer (see *Section 15 for Regulatory Information*).

Germ Cell Mutagenicity: Zinc Coatings only - Hexavalent Chromium is known to cause reproductive harm (see *Section 15 for Regulatory Information*).

Reproductive Toxicity: Zinc Coatings only - Hexavalent Chromium is known to cause reproductive harm (see *Section 15 for Regulatory Information*).

Acute Toxicity Estimates: Not applicable

Interactive effects of components: Not applicable

Section 12: Ecological Information (non-mandatory)

No data available for Aquatic Toxicity to Fish, Invertebrates, Plants, or Microorganisms, Toxicity to Terrestrial Animals, Toxicity to Terrestrial Plants, Persistence and Biodegradability, Bioaccumulation Potential, or Mobility in Soil.

This product contains no ingredients known to deplete the ozone layer.

Section 13: Disposal Considerations

Waste Disposal of Substance: Do not allow material into sewers/water supplies.

Do not contaminate ponds, waterways or ditches.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Steel scrap should be recycled whenever possible.

Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be disposed of in accordance with local/regional/national/international regulations.

Section 14: Transport Information

Not Applicable

Section 15: Regulatory Information

Federal Regulations: This product is an "Article" as defined by the OSHA Hazard Communication standard, 29 CFR 1910.1200 and is deemed exempt.

Canadian Regulatory Information: None applicable to the form of product.

Zinc coatings only: California Proposition 65 Information:



WARNING: These products can expose you to chemicals, including hexavalent chromium, which is known in the State of California to cause cancer and reproductive harm. For more information, go to <http://www.p65warnings.ca.gov>.

Stainless Steel only: California Proposition 65 Information:



WARNING: These products can expose you to chemicals, including nickel, which is known in the State of California to cause cancer and reproductive harm. For more information, go to <http://www.p65warnings.ca.gov>.

Section 16: Other Information

Hazardous Materials Information System (HMIS III) Ratings: Not applicable to the form of product.

Personal Protective Equipment: None required under anticipated conditions of use.

National Fire Protection Association (NFPA) Ratings: Not applicable to the form of product.

Publication Date: 1 September 2019 - Revision Date: Not applicable - Date of Prior SDS: Not applicable.

DISCLAIMER: As "Articles," neither a Safety Data Sheet (SDS) nor a GHS-Compliant label is required for these products. This SDS is provided to our customers as a voluntarily-offered resource of limited information to promote safe handling and proper use of our products; and as a courtesy and service.

INSULATION

- 1. FIBERGLASS INSULATION**
- 2. THERMAFIBER INSULATION**

Revision date 5/30/2024
Revision : 3.1
Supersedes version of 5/6/2024



SAFETY DATA SHEET

Fiberglass with ECOSE® Technology

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

SECTION 1: Identification

Product identifier

Product name Fiberglass with ECOSE® Technology
Product number KI_DP_101
Other means of identification None.
Trade name EcoBatt® (UnfacedandFaced) Building Insulation, EcoBatt® QuietTherm® (Unfaced and Faced) Building Insulation, Acoustical/IB Board, Acoustical Smooth Board, Air Duct Board (Atmosphere™), KB Blanket, Black Acoustical Board, Black Diffuser Board, Condensation Control Blanket, Duct Liner (Atmosphere™), Duct Wrap Faced and Unfaced (Atmosphere™), Earthwool® 1000° Pipe Insulation*, ET Batt*, ET HD Blanket, ET Blanket*, ET Board*, ET Panel*, Equipment Liner M, Everbilt (Unfaced and Faced) Building Insulation, Fabrication Board*, Flexible Duct Material, Guardian (Unfaced and Faced) Building Insulation, Hullboard*, Earthwool Insulation Board (Faced and Unfaced)*, KF_110*, KFR/ET Range Insulation*, KNSeries*, Manufactured Housing Duct Board, Manufactured Housing Insulation, Metal Building Insulation, Metal Building Cavity Insulation, Metal Building Filler Insulation, Earthwool Pipe & Tank Insulation*, Atmosphere Rigid Plenum Liner, Sill Sealer, Wall & Ceiling Liner M, Guardian by Knauf Insulation, Inner Safe™ Batt, EcoBatt® IRD, EcoRoll® Insulation, Basement Blanket Insulation, Performance + Duct Wrap (faced and unfaced), Performance + Duct Liner, Performance + Air Duct Board, Performance + Rigid Plenum Liner, Performance + Black Diffuser Board

Recommended use of the chemical and restrictions on use

Identified Uses Thermal and/or acoustic insulation for use in :
technical applications, industrial applications and in building construction.

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier Knauf Insulation Inc.
One Knauf Drive
Shelbyville
IN 46176-1496
Tel: 800 825 4434

www.knaufnorthamerica.com
sds@knaufinsulation.com
Region United States, Central & South America

Emergency telephone number

Emergency phone number 24hrs: Chemtrec Tel: 800 424 9300



SECTION 2: Hazards identification

Classification of the substance or mixture

OSHA Regulatory Status	This product is regulated as a nuisance dust under OSHA criteria.
Physical hazards	Not classified
Health hazards	Not classified
Environmental hazards	Not classified

Label elements

Hazard statements	Not classified
Contains	None.
Hazard pictograms	None.
Signal word	None.
Precautionary statements	None.
Supplemental label information	None.

The following sentences and pictograms apply to this product:



<http://www.knaufinsulation.com/comfort-and-handling>

Other hazards

Physical hazards	None.
Health hazards	Mechanical irritation of the skin, eyes and upper respiratory system.
Environmental hazards	None.
Most important symptoms/effects	Contact with skin, eyes and upper respiratory system may cause mechanical irritation.

Biosoluble Fiberglass is classified as a nuisance dust by OSHA.

Persistent Bioaccumulative Toxic Not relevant

* Heat-up precautions

For product with binder: When heated for the first time above 400°F, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system.

see section(s) : 8 & 10

SECTION 3: Composition/information on ingredients

Mixtures

Biosoluble Fiberglass	(1)(2)	82 - 100%
CAS number	—	
Classification	Not classified	
Ingredient comments	<p>(1) 650-016-00-2 - Man made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+MgO+BaO) content greater than 18% by weight meeting the requirements of Note Q of regulation n° 1272/2008 and therefore not classified as carcinogenic.</p> <p>(2) All Knauf Insulation products covered by this SDS are independently certified by EUCEB to be manufactured using biosoluble glass formulations and thus exempt from labeling under NTP or California Prop 65 requirements.</p>	

Thermo set, inert polymer bonding agent derived from plant starches

0 - 18%

CAS number

—

Classification

Not classified

Full text of R-phrases: see section 16

Specific chemical identity and/or exact percent concentration is withheld as trade secret.

SECTION 4: First aid measures**Description of first aid measures**

General information	Show this Safety Data Sheet to the medical professional in attendance. If symptoms occur, follow first aid measures as appropriate.
Note to physician :	No specific measures.
Inhalation	Remove from exposure. Rinse the throat and clear dust from airways.
Ingestion	Most important symptoms/effects
Skin contact	If mechanical irritation occurs, remove contaminated clothing and wash skin gently with cold water and soap.
Eye contact	Rinse abundantly with water for at least 15 minutes.

Most important symptoms and effects, both acute and delayed

General information	Mechanical irritation of the skin, eyes and upper respiratory system. Biosoluble Fiberglass is classified as a nuisance dust by OSHA.
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Indication of any immediate medical attention and special treatment needed

General information	If any adverse reaction or discomfort continues from any of the above exposures, seek professional medical advice.
Specific treatments	No specific measures.

SECTION 5: Fire-fighting measures**Extinguishing media**

Suitable extinguishing media	Water, foam, carbon dioxide (CO ₂), and dry powder.
Unsuitable extinguishing media	None.

Special hazards arising from the substance or mixture

General information	Products do not pose a fire hazard in use; however, some packaging materials or facings may be combustible. Products of combustion from product and packaging - carbon dioxide, carbon monoxide and some trace gases such as ammonia, nitrogen oxides and volatile organic substances.
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Advice for firefighters

General information	In large fires in poorly ventilated areas involving packaging materials respiratory protection / breathing apparatus may be required.
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SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions	Minimise direct contact with skin in order to prevent mechanical itching. In dusty environments, use suitable respiratory protection such as 3M 8210, N95 or equivalent. Use glasses or goggles when working with fiberglass insulation above shoulder height or in dusty environments. Where possible, use natural ventilation during installation in order to minimise dust levels.
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After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching. Dispose of surplus product in accordance with local regulations.

Use personal protection recommended in Section 8 of the SDS.

Environmental precautions

Environmental precautions Not relevant

Methods and material for containment and cleaning up

Methods for cleaning up Vacuum cleaner or dampen down with water spray prior to brushing up.

Reference to other sections For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Usage precautions Assure proper respiratory protection if potential dust exposure exceeds occupational exposure limits.

Conditions for safe storage, including any incompatibilities

Storage precautions To ensure optimum product performance; when packaging is removed or opened; products should be stored inside or covered to protect them from ingress of rain water or snow. Storage arrangements should ensure stability of stacked products and use on a first in first out basis (FIFO) is recommended.

Specific end use(s)

Specific end use(s) Thermal and/or acoustic insulation for use in :technical applications, industrial applications and in building construction.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits Biosoluble Fiberglass

Long-term exposure limit (8-hour TWA): ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): NIOSH 5 mg/m³ Mineral wool fiber, total particulate
Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ Particulates not otherwise regulated (PNOR), respirable fraction
Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ Particulates not otherwise regulated (PNOR), total dust

ACGIH = American Conference of Governmental Industrial Hygienists.
OSHA = Occupational Safety and Health Administration.
NIOSH = The National Institute for Occupational Safety and Health.

Exposure limit values have been established by many authorities. Check on limit values that apply in your local situation

Ingredient comments

(A3) - Fibers longer than 5 µm; diameter less than 3 µm; aspect ratio greater than 5:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination.

Biosoluble Fiberglass - see section(s) : 3.

Exposure controls/personal protection

Appropriate engineering controls Maintain sufficient mechanical or natural ventilation to assure fiber concentrations remain below PEL/TLV. Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices.

Eye/face protection

Use glasses or goggles when working with fiberglass insulation above shoulder height or in dusty environments.

Other skin and body protection

Minimize direct contact with skin in order to prevent mechanical itching.

Hygiene measures	After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching.
Respiratory protection	In dusty environments, use suitable respiratory protection.
Environmental exposure controls	Not relevant
* Heat-up precautions	For product with binder: When heated for the first time above 400°F, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied. Provide adequate ventilation. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Solid. Rolls. Panel. Loose fibre.
Color	Brown
Odor	Not relevant
Odor threshold	No data available
pH	Not relevant
Melting point	Not relevant
Initial boiling point and range	Not relevant
Flash point	Not relevant
Evaporation rate	Not relevant
Flammability (solid, gas)	Not relevant
Upper/lower flammability or explosive limits	Not relevant
Vapor pressure	Not relevant
Vapour density	Not relevant
Relative density	7 - 96 kg/m ³
Solubility	Generally chemically inert and slightly soluble in water.
Auto-ignition temperature	Not relevant
Decomposition temperature	Not relevant
Viscosity	Not relevant
Explosive properties	Not relevant
Oxidizing properties	Not relevant
Other information	
Devitrification temperature	Not relevant
Softening temperature	Not relevant
Nominal diameter of fibres	3 - 8 µm

Length weight geometric mean diameter less 2 standard errors < 6 µm

Orientation of fibres Random

SECTION 10: Stability and reactivity

Reactivity None.

Chemical stability Binder will decompose above 200°C (400°F).

Possibility of hazardous reactions None under normal use

Conditions to avoid Heating above 200 °C (400°F).

Incompatible materials Hydrofluoric acid will react with and dissolve glass.

Hazardous decomposition products

None under normal use

For product with binder: When heated for the first time above 400°F, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied. Provide adequate ventilation. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity (oral) - LD50 oral No data were identified for the product as a whole. Data are for constituents:
Biosoluble Fiberglass - Not applicable.
Thermo set, inert polymer bonding agent derived from plant starches. - Not applicable.

Acute toxicity (dermal) - LD50 dermal No data were identified for the product as a whole. Data are for constituents:
Biosoluble Fiberglass - Not applicable.
Thermo set, inert polymer bonding agent derived from plant starches. - Not applicable.

Acute toxicity (inhalation) - LC50 Inhalation No data were identified for the product as a whole. Data are for constituents:
Biosoluble Fiberglass - Not applicable.
Thermo set, inert polymer bonding agent derived from plant starches. - Not applicable.

Skin corrosion/irritation May cause mechanical irritation to skin

Serious eye damage/irritation May cause mechanical irritation to eyes.

Respiratory sensitization No data were identified for this product or its constituents.

Skin sensitization No data were identified for this product or its constituents.

Germ cell mutagenicity No data were identified for this product or its constituents.

Carcinogenicity SWA / WES requirements exempt biopersistent fibres as defined by notes. Results from a biopersistence test in line with the notes has shown that fibres in this product longer than 20 µm have a weighted half-life less than 40 days and meet the "Nota Q" requirements, thus this product is not classified as a carcinogen. None of the components of this product Reproductive toxicity are listed as a carcinogen.

Reproductive toxicity

Reproductive toxicity - Fertility No data were identified for this product or its constituents.

Developmental toxicity	No data were identified for this product or its constituents.
Specific target organ toxicity - single exposure	No data were identified for this product or its constituents.
Specific target organ toxicity - repeated exposure	No data were identified for this product or its constituents.
Aspiration hazard	Not relevant
Inhalation	Mechanical irritation to upper respiratory tract.
Ingestion	Non-hazardous when ingested.
Skin contact	Mechanical irritation to skin.
Eye contact	Mechanical irritation to eyes.
Most important symptoms/effects	Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble Fiberglass is classified as a nuisance dust by OSHA.

SECTION 12: Ecological information

General toxicity

This product is not ecotoxic to air, water or soil, by composition.

Persistence and degradability

Inert inorganic product with Thermo set, inert polymer bonding agent derived from plant starches; 0 - 18%

Bioaccumulative potential

Bioaccumulative potential No bioaccumulation potential

partition coefficient Not relevant

Mobility in soil Not considered mobile. Less than 1% leachable organic carbon if landfilled.

Results of PBT and vPvB assessment

Not relevant

Endocrine disrupting properties

Not relevant

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of in accordance with regulations and procedures in force in country of use or disposal.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

Disposal methods This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in landfill. If unsure, contact the local office of the USEPA, your local public health department or the local landfill regulators.

SECTION 14: Transport information

General information The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN number Not applicable

UN proper shipping name Not applicable

Transport hazard class(es) No transport warning sign required.

Packing group Not applicable

Environmental hazards

Environmentally hazardous substance/marine pollutant	None.
Special precautions for user	Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

Regulatory status This product is regulated as a nuisance dust under OSHA criteria.
 In accordance with industry practice and voluntary commitments, Knauf Insulation has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of fiberglass throughout the product life.

US Federal regulations
 SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities : Not regulated.
 CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA) : Not regulated.
 SARA 313 Emission Reporting : Not listed.
 SARA Section 311/312 Hazard Classes : Not regulated.

US State regulations
 California Proposition 65 On-product Warning : This product is exempt from labeling requirements under this Act.

SECTION 16: Other information

General information All products manufactured by Knauf Insulation are made of non-classified fibers and are certified by EUCEB.



Products meeting EUCEB certification requirements can be recognised by the EUCEB logo printed on the packaging.

Further information can be obtained from

www.euceb.org

www.knaufnorthamerica.com



Revision comments §1

Revision date 5/30/2024

Supersedes version of 5/6/2024

Revision : 3.1

SDS number KI_DP_101

Other information In 2001, the International Agency for Research on Cancer (IARC) reclassified mineral wool fibres and fiberglass from Group 2B (possibly carcinogenic) to Group 3 «agent which cannot be classified as for their carcinogenicity to humans». (See Monograph Vol 81, <http://monographs.iarc.fr/>)

This Safety Data Sheet / Product Data Sheet does not constitute a workplace assessment.
 Information contained in this document represents the state of our knowledge regarding this product as of the date of issue of the document. Attention of users is drawn to possible risks taken when the product is used for other applications than the ones it has been designed for.



SAFE USE INSTRUCTION SHEET

Creation Date 01-Jun-2015

Revision Date 05-Sep-2025

Version 5

0. GENERAL INFORMATION

This Safe Use Instruction Sheet is the document provided by Owens Corning to communicate recommended safe handling and use instructions for manufactured articles neither regulated by OSHA Hazard Communication Standard, 29 CFR 1910.1200 nor by the Canada Hazardous Products Regulation SOR/2015-17 (WHMIS 2015)

1. IDENTIFICATION

Product Name	Fiberglass Insulation Made with PureFiber® Technology Faced Products
Synonyms	Acoustical Backing Board, Attic Stair Insulator, Basement Blanket, R-13 Basement Finishing System™, Batts in Bags, Cathedral Batt Insulation, Cavity Wall, Certified R, EcoTouch®, Extended Flange 25, Flame Spread 25 Residential/Commercial Insulation, Insulation Batts & Rolls, Insulation for Flexible Duct, Manufactured Housing Insulation, MBI Plus, Metal Building Insulation, Metal Building Utility Blanket, Metal Framing Batts, Metal Framing Insulation, PINK® Insulation, PROPINK® Fast Batt®, QuietZone® Acoustic Batt, Sonobatts®, Aislhogar, Aislacustic™, RA Series Insulation, UtiliCore® HP5, PINK Next Gen™ Fiberglas™ Insulation, PINK Next Gen™ Fiberglas™ Insulation
Product code	OCIS00021
Recommended Use	Insulation
Manufacturer Address	Owens Corning Insulating Systems, LLC One Owens Corning Parkway Toledo, Ohio 43659
Company Phone Number	1-800-GET-PINK or 1-800-438-7465
E-mail address	safetydatasheet@owenscorning.com
Company Website	http://owenscorning.com/

2. HAZARDS IDENTIFICATION

Regulatory Status	<p>This product is considered an article. 29 CFR 1910.1200(c) definition of an article is as follows: "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees</p> <p>Manufactured articles which meet the definition of the Canadian Hazardous Products Act (any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product) are not regulated by the Canadian Hazardous Products Regulation SOR/2015-17</p>
Other Information	May cause temporary skin and mucous membranes itching due to the mechanical abrasion effect of fibers

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered as an article. No hazardous components are included in this product.

Chemical name	CAS No.	Weight-%	Trade Secret
Fiberglass wool	65997-17-3	85	*

4. FIRST AID MEASURES

Description of first aid measures

- Eye contact**
 - Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
 - DO NOT rub or scratch eyes
 - If eye irritation persists: Get medical advice/attention
 - Rinse thoroughly with plenty of water, also under the eyelids
 - If symptoms persist, call a physician

- Skin contact**
 - Wash off immediately with soap and plenty of cold water
 - DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of fibers and dust
 - Use a wash cloth to help remove fibers and dust
 - DO NOT rub or scratch affected area
 - Remove contaminated clothing and shoes
 - If skin irritation persists, call a physician
 - If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin
 - Never use compressed air to remove fibers from skin
 - Wash off immediately with plenty of water

- Inhalation**
 - Remove to fresh air
 - If symptoms persist, call a physician

- Ingestion**
 - Accidental ingestion of this product is unlikely
 - Rinse mouth with water and drink water to remove fibers from the throat
 - If this does occur watch person for several days to make sure intestinal blockage does not occur
 - If symptoms persist, call a physician

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media**
 - Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

- Protective equipment and precautions for firefighters**
 - As in any fire, wear self-contained breathing apparatus (positive-pressure), MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions**
 - Avoid contact with eyes and skin

- Methods for cleaning up**
 - Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination
 - Avoid dry sweeping
 - Pick up and transfer to properly labeled containers

- Use personal protective equipment as required
- Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry
- Take up mechanically, placing in appropriate containers for disposal
- Avoid creating dust
- Clean contaminated surface thoroughly

7. HANDLING AND STORAGE

- Storage Conditions**
- Keep product in packaging until use to minimize potential dust generation
 - Product should be kept dry and undercover

- Incompatible materials**
- None known based on information supplied

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
Fiberglass wool 65997-17-3	-	-	-

NOTE: Asphalt is only used on Kraft faced material.

- Engineering Controls**
- Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits
 Dust collection system must be used in transferring operations, cutting or other dust generating processes, such as using power tools
 Vacuum or wet clean-up methods should be used

Individual protection measures, such as personal protective equipment

- Eye/face protection**
- Wear safety glasses with side shields (or goggles)
- Skin and body protection**
- Wear protective gloves
 - Wear long-sleeved shirt and long pants
- Respiratory protection**
- When workers are facing airborne particulates/dust concentrations above the exposure limits, they must use an appropriate certified respirator
 - A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended
- General hygiene considerations**
- Wash hands before breaks and immediately after handling products
 - Remove and wash contaminated clothing before re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Appearance	Fibrous
Odor	Sweet Organic
Color	Pink
Water solubility	Insoluble in water

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions • None under normal processing conditions

Hazardous decomposition products • None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Product Information Fiberglass wool may cause temporary skin and mucous membranes itching due to mechanical abrasion effect of fibers

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

NTP (National Toxicology Program) In June 2011, The National Toxicology Program (NTP) removed biosoluble glass wool fibers from its list of possible carcinogens used for home and building insulation

12. ECOLOGICAL INFORMATION

This product is not expected to be hazardous for the environment.

13. DISPOSAL CONSIDERATIONS

Disposal of wastes

• Disposal should be in accordance with applicable regional, national and local laws and regulations

14. TRANSPORT INFORMATION

This product is not classified as dangerous goods according to international transport regulations

15. REGULATORY INFORMATION

International Inventories

This product is classified as an article. Articles are exempted from registration or listing under chemicals inventories like TSCA (USA), DSL/NDL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS)



Warning

California Proposition 65

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov NOTE: This warning only applies to Kraft faced material with an asphalt adhesive.

16. OTHER INFORMATION

Creation Date 01-Jun-2015
Revision Date 05-Sep-2025
Revision Note Sections updated 1, 3, 8,

Disclaimer

The information provided in this Safe User Instruction Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,

transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safe Use Instruction Sheet



SAFE USE INSTRUCTION SHEET

Creation Date 16-Dec-1997

Revision Date 19-Mar-2021

Version 4

0. General Information

This Safe Use Instruction Sheet is the document provided by Owens Corning to communicate recommended safe handling and use instructions for manufactured articles neither regulated by OSHA Hazard Communication Standard, 29 CFR 1910.1200 nor by the Canada Hazardous Products Regulation SOR/2015-17 (WHMIS 2015)

1. IDENTIFICATION

Product Name	Fiberglass Insulation Made With PureFiber® Technology Unfaced Products
Synonyms	Acoustical Backing Board, Attic Door Insulator, Attic Hatch Insulator, Basement Blanket, R-13 Basement Finishing System™, Batts in Bags, Cathedral Batt Insulation, Cavity Wall, Certified R, EcoTouch®, Extended Flange 25, Flame Spread 25 Hi-Perm Residential/Commercial Insulation, Insulation Batts & Rolls, Insulation for Flexible Duct, Manufactured Housing Insulation, MBI Plus, Metal Building Insulation, Metal Building Utility Blanket, Metal Framing Batts, Metal Framing Insulation, NOISE Stop Blanket, PINK® Insulation, PROPINK® Fast Batt®, QuietZone® Acoustic Batt, Sonobatts®, Aislhogar, Aislacoustic™, Deco SKY™, RA Series Insulation, UtiliCore® HP5, PINK Next Gen™ Fiberglas™ Insulation, PINK Next Gen™ Fiberglas™ Insulation
Product code	OCIS00026
Recommended Use	Insulation
Manufacturer Address	Owens Corning Insulating Systems, LLC One Owens Corning Parkway Toledo, Ohio 43659
Company Phone Number	1-800-GET-PINK or 1-800-438-7465
E-mail address	safetydatasheet@owenscorning.com
Company Website	http://owenscorning.com/

2. HAZARDS IDENTIFICATION

Regulatory Status This product is considered an article. 29 CFR 1910.1200(c) definition of an article is as follows: "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees

Manufactured articles which meet the definition of the Canadian Hazardous Products Act (any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product) are not regulated by the Canadian Hazardous Products Regulation SOR/2015-17

Other Information May cause temporary skin and mucous membranes itching due to the mechanical abrasion

effect of fibers

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered as an article. No hazardous components are included in this product.

4. FIRST AID MEASURES

Description of First Aid Measures

- | | |
|---------------------|---|
| Eye contact | <ul style="list-style-type: none">• DO NOT rub or scratch eyes• Rinse thoroughly with plenty of water, also under the eyelids• If symptoms persist, call a physician• Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes• If eye irritation persists: Get medical advice/attention |
| Skin contact | <ul style="list-style-type: none">• If skin irritation persists, call a physician• Wash off immediately with plenty of water• Wash off immediately with soap and plenty of cold water• DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of fibers and dust• Use a wash cloth to help remove fibers and dust• DO NOT rub or scratch affected area• Remove contaminated clothing and shoes• If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin• Never use compressed air to remove fibers from skin |
| Inhalation | <ul style="list-style-type: none">• Remove to fresh air• If symptoms persist, call a physician |
| Ingestion | <ul style="list-style-type: none">• Accidental ingestion of this product is unlikely• Rinse mouth with water and drink water to remove fibers from the throat• If this does occur watch person for several days to make sure intestinal blockage does not occur• If symptoms persist, call a physician |

5. FIRE-FIGHTING MEASURES

- | | |
|--|---|
| Suitable extinguishing media | <ul style="list-style-type: none">• Use extinguishing measures that are appropriate to local circumstances and the surrounding environment |
| Protective equipment and precautions for firefighters | <ul style="list-style-type: none">• As in any fire, wear self-contained breathing apparatus (positive-pressure), MSHA/NIOSH (approved or equivalent) and full protective gear |

6. ACCIDENTAL RELEASE MEASURES

- | | |
|--------------------------------|--|
| Personal precautions | <ul style="list-style-type: none">• Avoid contact with eyes and skin |
| Methods for cleaning up | <ul style="list-style-type: none">• Use personal protective equipment as required• Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry• Take up mechanically, placing in appropriate containers for disposal• Avoid creating dust• Clean contaminated surface thoroughly• Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination |

- Avoid dry sweeping
- Pick up and transfer to properly labeled containers

7. HANDLING AND STORAGE

- Precautions for safe handling**
- Prevent and/or minimize dust formation
 - Do not breathe dust
 - Wear appropriate personal protective equipment in case of direct contact with the product
- Storage Conditions**
- Keep product in packaging until use to minimize potential dust generation
 - Product should be kept dry and undercover
- Incompatible materials**
- None known based on information supplied

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
Fiberglass wool 65997-17-3	TWA: 1 fiber/cm ³ respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m ³ inhalable particulate matter	-	-

- Engineering Controls**
- Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits
Dust collection system must be used in transferring operations, cutting or other dust generating processes, such as using power tools
Vacuum or wet clean-up methods should be used

Individual protection measures, such as personal protective equipment

- Eye/face protection**
- Wear safety glasses with side shields (or goggles)
- Skin and body protection**
- Wear protective gloves
 - Wear long-sleeved shirt and long pants
- Respiratory protection**
- When workers are facing airborne particulates/dust concentrations above the exposure limits, they must use an appropriate certified respirator
 - A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended

- General Hygiene Considerations**
- Wash hands before breaks and immediately after handling products
 - Remove and wash contaminated clothing before re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** Solid
- Appearance** Fibrous
- Odor** Organic
- Color** Pink
- Water solubility** Insoluble in water

10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions • None under normal processing conditions

Hazardous Decomposition Products • None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Product Information	Fiberglass wool may cause temporary skin and mucous membranes itching due to mechanical abrasion effect of fibers
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen
IARC (International Agency for Research on Cancer)	In October 2001, the International Agency for Research on Cancer (IARC) classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans". The 2001 decision was based on human studies and animal research that have not shown an association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease
NTP (National Toxicology Program)	In June 2011, The National Toxicology Program (NTP) removed biosoluble glass wool fibers from its list of possible carcinogens used for home and building insulation

12. ECOLOGICAL INFORMATION

This product is not expected to be hazardous for the environment

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with applicable regional, national and local laws and regulations

14. TRANSPORT INFORMATION

This material is not subject to regulation as a hazardous material for shipping

15. REGULATORY INFORMATION

International Inventories	This product is classified as an article. Articles are exempted from registration or listing under chemicals inventories like TSCA (USA), DSL/NDSL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS)
California Proposition 65	This product does not contain any Proposition 65 chemicals.

16. OTHER INFORMATION

Creation Date	16-Dec-1997
Revision Date	19-Mar-2021
Revision Note	Sections updated 1, 3,

Disclaimer

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use

End of Safe Use Instruction Sheet



SAFE USE INSTRUCTION SHEET

Creation Date 28-Jul-2016

Revision Date 05-Jun-2023

Version 8

0. GENERAL INFORMATION

This Safe Use Instruction Sheet is the document provided by Owens Corning to communicate recommended safe handling and use instructions for manufactured articles neither regulated by OSHA Hazard Communication Standard, 29 CFR 1910.1200 nor by the Canada Hazardous Products Regulation SOR/2015-17 (WHMIS 2015)

1. IDENTIFICATION

Product Name	Bonded Mineral Wool (Unfaced)
Synonyms	Thermafiber® FireSpan® (40, 90 & 120), Thermafiber® Safing™, Thermafiber® FireLedge®, Thermafiber® RainBarrier®, HD, Thermafiber® RainBarrier® 45, Thermafiber® SAFB™ (Sound Attenuation Fire Blanket), Thermafiber® VersaBoard®, Thermafiber® TopStop®, Thermafiber® FixtureShield®, Thermafiber® U.S. Coast Guard Felt, Thermafiber® Industrial Felt, Thermafiber® Industrial Board, Thermafiber® Industrial Blanket, Thermafiber® Metal Mesh Blankets, Thermafiber® Industrial Fabrication Board, Thermafiber® Fire & Sound Guard® Plus, RainBarrier® ci HC 80, RainBarrier® ci HC Plus 110, RainBarrier® ci HC Max
Product code	OCMW00004
Recommended Use	Curtain Wall Insulation, Fire Containment Insulation, Thermafiber® Impasse® No Backer Bar™ System, Continuous Insulation, Sound Control Insulation, Commercial Insulation, Residential & Light Commercial Insulation, Head-of-Wall Insulation, Light Fixture Insulation, Maritime Insulation, Industrial Felt, Industrial Insulation, Semi-Refractory Felt, Horticulture
Manufacturer Address	Owens Corning Mineral Wool, LLC 3711 Mill St, Wabash, IN, 46992
Company Phone Number	1-800-GET-PINK or 1-800-438-7465
E-mail address	safetydatasheet@owenscorning.com
Company Website	http://owenscorning.com/

2. HAZARDS IDENTIFICATION

Regulatory Status	<p>This product is considered an article. 29 CFR 1910.1200(c) definition of an article is as follows: "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees</p> <p>This product is considered an article per the Canadian Hazardous Products Regulation SOR/2015-17 Manufactured articles which meet the definition of the Canadian Hazardous Products Act (any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product) are not regulated by the Canadian Hazardous Products Regulation SOR/2015-17</p>
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3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health

Mineral wool may cause temporary skin and mucous membranes itching due to the mechanical abrasion effects of fibers.

Chemical name	CAS No.	Weight-%	Trade Secret
Mineral Wool	65997-17-3	90-100	*

4. FIRST AID MEASURES

Description of First Aid Measures

- Eye contact**
- DO NOT rub or scratch eyes
 - Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes
 - If eye irritation persists: Get medical advice/attention
- Skin contact**
- Wash off immediately with soap and plenty of cold water
 - DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of fibers and dust
 - Use a wash cloth to help remove fibers and dust
 - DO NOT rub or scratch affected area
 - Remove contaminated clothing and shoes
 - If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin
 - If skin irritation persists, call a physician
 - Never use compressed air to remove fibers from skin
- Inhalation**
- Remove to fresh air
 - If symptoms persist, call a physician
- Ingestion**
- Accidental ingestion of this product is unlikely
 - Rinse mouth with water and drink water to remove fibers from the throat
 - If this does occur watch person for several days to make sure intestinal blockage does not occur
 - If symptoms persist, call a physician

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media**
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
- Protective equipment and precautions for firefighters**
- As in any fire, wear self-contained breathing apparatus (positive-pressure), MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions**
- Avoid contact with eyes and skin
- Methods for cleaning up**
- Use personal protective equipment as required
 - Avoid creating dust
 - Clean contaminated surface thoroughly
 - Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry
 - Take up mechanically, placing in appropriate containers for disposal

7. HANDLING AND STORAGE

- Precautions for safe handling**
- Prevent and/or minimize dust formation
 - Do not breathe dust
 - Wear appropriate personal protective equipment in case of direct contact with the product
- Storage Conditions**
- Keep product in packaging until use to minimize potential dust generation

- Product should be kept dry and undercover

Incompatible materials

- None known based on information supplied

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines**Engineering Controls**

Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits

Dust collection system must be used in transferring operations, cutting or other dust generating processes, such as using power tools

Vacuum or wet clean-up methods should be used

Individual protection measures, such as personal protective equipment**Eye/face protection**

- Wear safety glasses with side shields (or goggles)

Skin and body protection

- Wear protective gloves
- Wear long-sleeved shirt and long pants

Respiratory protection

- When workers are facing airborne particulates/dust concentrations above the exposure limits, they must use an appropriate certified respirator
- A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended

General Hygiene Considerations

- Wash hands before breaks and immediately after handling products
- Remove and wash contaminated clothing before re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

Solid

Appearance

Fibrous

Odor

No information available

Color

No information available

Water solubility

Insoluble in water

10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions • None under normal processing conditions

Hazardous Decomposition Products • None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Product Information

Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. High exposures may cause difficulty breathing, congestion, and chest tightness

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP

12. ECOLOGICAL INFORMATION

This product is not expected to be hazardous for the environment.

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with applicable regional, national and local laws and regulations

14. TRANSPORT INFORMATION

This material is not subject to regulation as a hazardous material for shipping

15. REGULATORY INFORMATION**International Inventories**

This product is classified as an article. Articles are exempted from registration or listing under chemicals inventories like TSCA (USA), DSL/NDSL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS)

California Proposition 65

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical name	California Proposition 65
Formaldehyde 50-00-0	Carcinogen

Note: The substance is only relevant in trace amount of release due to the binder composition. The substance that is subject to California Proposition 65 in this product is in a trace amount that is not subject to the occupational exposure limit.

16. OTHER INFORMATION

Creation Date 28-Jul-2016
Revision Date 05-Jun-2023
Revision Note SDS sections updated 1, components review

Disclaimer

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

End of Safe Use Instruction Sheet

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 2/6/2025

Issue date: 2/6/2025

Supersedes: 12/6/2024

Version: 1.6

SECTION 1: Identification

1.1. Identification

Product form	Article
Product name	Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier
Product code	BU Fire Protection Article
Other means of identification	Mineral wool products: CP 777 CP 767 CFS-TTS MD P CFS-TTS MD C CFS-CO Mineral wool FS boards: CP 670 CP 673 CP 676 CFS-CT B CFS-CT HDB Insulated sleeve: CP 645 Cavity Barrier: CFS-VB E60 CFS-VB E120 CFS-NVB E120

1.2. Recommended use and restrictions on use

Use of the substance/mixture	Construction products
Restrictions on use	Building and construction work

1.3. Supplier

Supplier Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway US TX 75024 Plano USA T +1 9724035800 1-800-879-8000 toll free, F +1 918 254 0522 us-sales@hilti.com	Department issuing data specification sheet Hilti AG Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111 product.compliance-fire.protection@hilti.com
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1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

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2.3. Other hazards which do not result in classification

Other hazards which do not result in classification A Safety Data Sheet is not required due to the classification of these products as "articles" according to Regulation (EC) No. 1907/2006 of 18 December 2006 (EU) / 29CFR 1910.1200 (U.S.A.). Consequently, these products are exempted from CLP / OSHA Labeling and SDS requirements.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS-US classification
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na ₂ O+K ₂ O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Nota Q conditions		-	≥ 60	Not classified
formaldehyde ...%		CAS-No.: 50-00-0	< 0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.
First-aid measures after skin contact	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth out with water. Drink plenty of water.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	The product itself does not burn. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	Wear recommended personal protective equipment.
Emergency procedures	Evacuate unnecessary personnel.
Measures in case of dust release	Wear suitable respiratory protection.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Minimise generation of dust.
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6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust.
Hygiene measures	Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Keep container closed when not in use. Avoid creating or spreading dust. Store in a dry place.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

No additional information available

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

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formaldehyde ...% (50-00-0)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Formaldehyde
ACGIH OEL TWA	0.1 ppm
ACGIH OEL STEL	0.3 ppm
ACGIH OEL C	0.3 ppm
Remark (ACGIH)	URT & eye irr; SEN; A2
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Formaldehyde
OSHA PEL TWA	0.75 ppm OSHA 1910.1048(c)(1)
OSHA PEL STEL	2 ppm OSHA 1910.1048(c)(2)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na₂O+K₂O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Nota Q conditions	
No additional information available	

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Protective clothing. Gloves. Safety glasses.

Hand protection:				
Wear protective gloves.				
Type	Material	Permeation	Thickness (mm)	Penetration
Reusable gloves				
Eye protection:				
Chemical goggles or safety glasses				
Skin and body protection:				
Wear suitable protective clothing				
Respiratory protection:				
In case of dust formation use respirator with filter: Dust production: dust mask with filter type P2				

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

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Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Fibrous.
Colour	Various colours
Odour	odourless
Odour threshold	No data available
pH	No data available
Melting point	> 1000 °C
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not flammable. Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	20 – 250 kg/m ³
Solubility	Insoluble.
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

formaldehyde ...% (50-00-0)	
LD50 oral	600 mg/kg
LD50 dermal	270 mg/kg
LC50 Inhalation - Rat [ppm]	480 ppm

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

formaldehyde ...% (50-00-0)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens

Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	No data available
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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formaldehyde ...% (50-00-0)	
EC50 - Crustacea [1]	2 mg/l
NOEC chronic crustacea	1 mg/l

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.2. Persistence and degradability

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

DOT

Not applicable

TDG

Not applicable

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IMDG

Not applicable

IATA

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
formaldehyde ...%	50-00-0	Present	Active	
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na ₂ O+K ₂ O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Nota Q conditions		Not present	-	

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

formaldehyde ...%	CAS-No. 50-00-0	< 0.1%
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formaldehyde ...% (50-00-0)

Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

15.2. International regulations

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

formaldehyde ...% (50-00-0)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

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15.3. US State regulations

WARNING: This product can expose you to Formaldehyde (gas), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

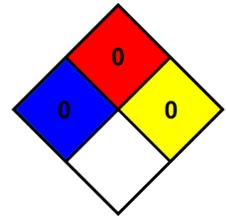
SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date 02/06/2025
 Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
 Other information None.

Full text of H-statements	
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.

NFPA health hazard 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
 NFPA fire hazard 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
 NFPA reactivity 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:			
Section	Changed item	Change	Comments
			add product name: mineral wool

SDS_US_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

WALLBOARD

- 1. GYPSUM PANELS**
- 2. GLASS MAT FACED PANELS**
- 3. LEAD LINED GYPSUM PANELS**
- 4. CEMENT BOARD**

1. Identification

Product identifier	CertainTeed Type X Gypsum Panels
Other means of identification	
Product identifier	5/8" Abuse Resistant Type X, 5/8" CertainTeed® Type X, 5/8" CertainTeed® Exterior Soffit Type X, 5/8" Extreme Abuse, 5/8" Extreme Impact, 5/8" CertainTeed® Veneer Plaster Base Type X, 5/8" CertainTeed Patch and Repair Drywall Panels, CertainTeed® Type X CarbonLow™
Synonyms	Gypsum Panels
Recommended use	Gypsum panels for interior wall, ceiling, and exterior soffit applications.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Company name	CertainTeed Gypsum
Address	20 Moores Road Malvern, PA 19355 United States of America
Telephone	1-800-233-8990
Website	www.certainteed.com
Emergency telephone	3E Global Incident Response Hotline +1 760 476 3962 +1 866 519 4752 (Toll Free) Access Code: 336250

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate	10101-41-4	80 - 100
Cellulose	9004-34-6	1 - 5

Composition comments

The exact concentrations of the above listed chemicals are being withheld as a trade secret. All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.

Raw material in this product contains respirable crystalline silica as an impurity. Independent testing of this product suggests that under most conditions of use, this product will not result in exposure to respirable crystalline silica that exceeds OSHA's Action Level, (AL) or Permissible Exposure Limit (PEL). However, actual concentrations of respirable silica may vary based on the conditions of use. Specific exposures can only be determined by workplace industrial hygiene testing.

<https://www.certainteed.com/drywall/osha-crystalline-silica-techupdate-certainteed-gypsum-board-products>

4. First-aid measures

Inhalation

In case of inhalation of dust: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and delayed

Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, hazardous combustion products are released that may include: Carbon oxides. Sulfur oxides. Fumes of metal oxides.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Pick up and arrange disposal without creating dust. Collect dust using a vacuum cleaner equipped with HEPA filter. Recover and recycle, if practical. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a dry place. Protect from weather and prevent exposure to sustained moisture. Protect from direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 10101-41-4)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Cellulose (CAS 9004-34-6)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 10101-41-4)	TWA	10 mg/m ³	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection

Unvented, tight fitting goggles should be worn in dusty areas.

Skin protection

Hand protection

Wear suitable protective gloves to prevent cuts and abrasions. Suitable gloves can be recommended by the glove supplier.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Follow OSHA respirator regulations (29CFR 1910.134) and use NIOSH/MSHA approved respirators. Appropriate respirator selection should be made by a qualified professional.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.

Color	White.
Odor	Odorless.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not flammable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not applicable, product is a mixture.
Auto-ignition temperature	Not available.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Exposure to sunlight. Water, moisture. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Decomposition is not expected under normal conditions of use and storage. In the event of fire: See Section 5.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	Dusts may irritate the respiratory tract, skin and eyes.
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Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	May cause irritation through mechanical abrasion.
Serious eye damage/eye irritation	Airborne dust may cause mechanical eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil The product is insoluble in water. Not expected to be mobile in soil.

Other adverse effects No data available for this product.

13. Disposal considerations

Disposal instructions Recover and reclaim or recycle, if practical. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No**SARA 313 (TRI reporting)**

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (CAS 10101-41-4)

Cellulose (CAS 9004-34-6)

US. New Jersey Worker and Community Right-to-Know Act

Cellulose (CAS 9004-34-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Cellulose (CAS 9004-34-6)

US. Rhode Island RTK

Calcium sulfate dihydrate (CAS 10101-41-4)

Cellulose (CAS 9004-34-6)

California Proposition 65California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 08-September-2023
Revision date 03-April-2025
Revision notes Section 1: Identification- Product Identifier
Version # 02
Further information E - Safety Glasses, Gloves, Dust Respirator
HMIS® ratings Health: 0
Flammability: 0
Physical hazard: 0
Personal protection: E

Disclaimer CertainTeed Gypsum cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.



SAFETY DATA SHEET

1. Identification

Product identifier SHEETROCK® Brand FIRECODE® Core Gypsum Panels

Other means of identification

SDS number 54000002001

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5
Kaolin	1332-58-7	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains varying levels of respirable crystalline silica, averaging up to 2.0 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting; follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m ³	Respirable fraction.
Cellulose (CAS 9004-34-6)	PEL	15 mg/m ³	Total dust.
		5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	Paper faced with gypsum core.
Physical state	Solid.
Form	Panel.
Color	Gray to off-white.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	6 - 8
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.

Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	42 lb/ft ³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).

Symptoms related to the physical, chemical and toxicological characteristics Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity Low hazard.

Components	Species	Test Results
Kaolin (CAS 1332-58-7)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Oral LD50	Rat	> 5000 mg/kg
* Estimates for product may be based on additional component data not shown.		
Skin corrosion/irritation	Gypsum was not found to be a skin irritant.	
Serious eye damage/eye irritation	Gypsum does not cause serious eye damage or irritation.	
Respiratory sensitization	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.	
Skin sensitization	Not a skin sensitizer (2).	
Germ cell mutagenicity	No evidence of mutagenic potential exists (3,4,5).	
Carcinogenicity	No evidence of carcinogenic potential exists (6).	
Reproductive toxicity	No evidence of reproductive toxicity exists (2).	
Specific target organ toxicity - single exposure	Not toxic to lung tissue.	
Specific target organ toxicity - repeated exposure	Not toxic to lung tissue (6).	
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.	
Further information	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.	

12. Ecological information

Ecotoxicity	The product contains a substance which is very toxic to aquatic organisms.	
Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 1970 mg/l, 96 hours
Persistence and degradability	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.	
Bioaccumulative potential	Bioaccumulation is not expected.	
Mobility in soil	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).	
Other adverse effects	None expected.	

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT	Not regulated as a hazardous material by DOT.
IATA	Not regulated as a dangerous good.
IMDG	Not regulated as a dangerous good.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations	This product is not hazardous according to OSHA 29CFR 1910.1200.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)
Kaolin (CAS 1332-58-7)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)
Kaolin (CAS 1332-58-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

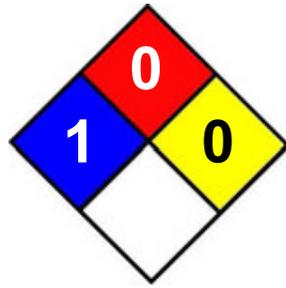
*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	17-December-2013
Revision date	20-July-2023
Version #	03
Further information	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings



List of abbreviations

NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier

Product list

Paper Faced Gypsum Panels

Product List A

ToughRock® Veneer Plaster Base (Blueboard)
ToughRock® Flexroc® Gypsum Board
ToughRock® Mold-Guard™ Gypsum Board
ToughRock® Basement Board® Gypsum Board
ToughRock® Sound Deadening Gypsum Board
ToughRock® Stretch 54® Gypsum Board
ToughRock® Soffit Board

Product List B

ToughRock® Gypsum Board

Product List C

ToughRock® Span 24® Lite-Weight Ceiling Board
ToughRock® Stretch 54® Lite-Weight Gypsum Board
ToughRock® Lite-Weight Gypsum Board
ToughRock® MH Ceiling Board
ToughRock® Fireguard X® Gypsum Board
Toughrock® Fireguard 45® Gypsum Board

Product List D

ToughRock® Gypsum Sheathing
ToughRock® Span 24® Ceiling Board
ToughRock® Fireguard X® Gypsum Sheathing
ToughRock® Fireguard X® Stretch 54® Gypsum Board
ToughRock® Fireguard X® Mold-Guard™ Abuse-Resistant Gypsum
ToughRock® Fireguard X® Veneer Plaster Board
ToughRock® Fireguard X® Mold-Guard™ Gypsum Board
Toughrock® Fireguard X® Mold-Guard™ Max-Abuse Gypsum Board
Toughrock® Fireguard X® Mold-Guard™ Max-Impact Gypsum Board

Product List E

ToughRock® Shaftliner
ToughRock® Fireguard C® Soffit Board
ToughRock® Fireguard C® Stretch 54® Gypsum Board

Product List F

ToughRock® Lite-Weight Veneer Plaster Base

Product List G

ToughRock® Lite-Weight Fire-Rated Gypsum Board
ToughRock® Fireguard C® Gypsum Board

Other means of identification

Product code

GP-71A

Recommended use

Products accommodate wide range of wall, floor and ceiling applications and soffit treatments.

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Company name

Georgia-Pacific Gypsum LLC

Address

133 Peachtree Street, NE
Atlanta, GA 30303

Telephone

Technical Information 800.225.6119
(M)SDS Request 404.652.5119

E-mail

Not available.

Emergency phone number

Chemtrec - Emergency 800.424.9300

2. Hazard(s) identification

Emergency overview	Cutting, sanding, or otherwise working with this product may generate large amounts of dust. Dust may be irritating to eyes, skin and respiratory system.
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling. Get medical advice/attention if you feel unwell.
Storage	Store away from incompatible materials (see Section 10 of the SDS).
Disposal	Dispose of contents/container in accordance with applicable regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	80 - 100
SILICATE COMPOUND*****		Proprietary	1 - 5
VERMICULITE****		1318-00-9	1 - 5
BORIC ACID**		10043-35-3	0.5 - 1.5
CONTINUOUS FILAMENT GLASS FIBERS***		65997-17-3	0.5 - 1.5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	0.1 - 1
Other components below reportable levels			0 - 0.1

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments

** Found in products in List B, C and F, Section 1 of this SDS.

*** Found in products in List C, D, E and F, Section 1 of this SDS.

**** Found in products in List E, F and G, Section 1 of this SDS.

***** Only found in products in List G, Section 1 of this SDS.

Gypsum (calcium sulfate, dihydrate) contains naturally occurring silica crystalline (quartz), which is listed as a lung carcinogen. See Section 8 for exposure information.

*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

**Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

4. First-aid measures

Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Skin contact	For skin contact, wash immediately with soap and water.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. Do not rub the eyes.
Ingestion	May result in obstruction and irritation if ingested. Get medical attention.

Most important symptoms/effects, acute and delayed

Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Use personal protection recommended in Section 8. Keep unnecessary personnel away.

Methods and materials for containment and cleaning up

Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

Environmental precautions

Keep out of drains, sewers, ditches, and waterways.

7. Handling and storage

Precautions for safe handling

Practice good housekeeping. Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
SILICATE COMPOUND*****	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
SILICATE COMPOUND*****	TWA	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.
VERMICULITE**** (CAS 1318-00-9)	TWA	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

ACGIH

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	3 mg/m3	Respirable Particles.
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.
VERMICULITE**** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable particles.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
SILICATE COMPOUND*****	TWA	2 mg/m3	Respirable fraction.
VERMICULITE**** (CAS 1318-00-9)	TWA	10 mg/m3	Inhalable particles.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)	TWA	3 fibers/cm3 5 mg/m3	Fibrous dust. Fiber, total
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
SILICATE COMPOUND*****	TWA	5 mg/m3 10 mg/m3	Respirable. Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
	*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
	**Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles). Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Eye wash fountain is recommended.
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear appropriate chemical resistant clothing. Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
Thermal hazards	Not applicable.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Keep away from food and drink.

9. Physical and chemical properties

Appearance	Paper faced gypsum boards
Physical state	Solid.
Form	Solid.
Color	Facing color varies
Odor	Odorless
Odor threshold	Not available.
pH	7
Melting point/freezing point	2642 °F (1450 °C) estimated
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable

Flammability limit - upper (%)	Not applicable
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	2.2 - 2.4 g/cm ³
Solubility(ies)	
Solubility (water)	0.2 % @ 22°C
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available.
Viscosity	Not applicable
Other information	
Explosive properties	Not explosive.
Flash point class	Not flammable
Oxidizing properties	Not oxidizing.
Specific gravity	2.2 - 2.4

10. Stability and reactivity

Reactivity	Contact with strong acids produces carbon dioxide.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Acids. Aluminum. Phosphorus.
Hazardous decomposition products	May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Dust generated during processing may cause eye irritation.
Ingestion	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Paper Faced Gypsum Panels		
Acute		
Dermal		
ATEmix		251300 mg/kg
Inhalation		
LC50	Rat	363.6 mg/l, 4 Hours
Oral		
ATEmix		1684 mg/kg

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
Acute		
Inhalation		
LC50	Rat	> 2 mg/l, 4 Hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
Acute		
Oral		
LD50	Rat	> 1581 mg/kg
SILICATE COMPOUND*****		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not likely to cause respiratory sensitization.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	Not expected to be hazardous by OSHA/WHMIS criteria.	
<p>Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.</p>		
IARC Monographs. Overall Evaluation of Carcinogenicity		
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) 1 Carcinogenic to humans.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Cancer		
US. National Toxicology Program (NTP) Report on Carcinogens		
CONTINUOUS FILAMENT GLASS FIBERS*** Reasonably Anticipated to be a Human Carcinogen.		
(CAS 65997-17-3)		
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Known To Be Human Carcinogen.		
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Not hazardous under normal conditions of use.	
Further information	*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.	
12. Ecological information		
Ecotoxicity	Not considered to be harmful to aquatic life.	

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
Aquatic		
Crustacea	EC50	Daphnia 766.5 mg/L, 48 Hours
Fish	LC50	Razorback sucker (<i>Xyrauchen texanus</i>) > 100 mg/l, 96 hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Zebra danio (<i>Danio rerio</i>) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Zebra danio (<i>Danio rerio</i>) > 10000 mg/l, 96 Hours OECD SIDS

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

BORIC ACID** 0.175

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated "active".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

SAFETY DATA SHEET

Manufactured Article - Voluntary Product Information

1. Identification

Product identifier

Product list

Glass Mat Faced Gypsum Panels

Product List A

DensArmor Plus® Interior Panel
DensArmor Plus® Fireguard® Abuse-Resistant Panels
DensArmor Plus® Fireguard® Impact-Resistant Panels
DensArmor Plus® Fireguard® Interior Panels
DensDeck® Prime Roof Board
DensDeck® Roof Board
DensDeck® Prime Fireguard® Roof Board
DensDeck® Fireguard® Roof Board
DensDeck® StormX® Prime Roof Board
DensDeck® ProFast
DensElement® Sheathing
DensGlass® Fireguard® Sheathing
DensGlass® Shaftliner
DensGlass® Sheathing
DensShield® Fireguard® Tile Backer
DensShield® Tile Backer
DensDeck® ProFast™ Prime Roof Board

Product List B

DensArmor Plus® Fireguard C® Interior Panels

Other means of identification

Product code

GP-71C

Recommended use

Products accommodate a wide range of wall, floor, ceiling and roof applications.

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Company name

Georgia-Pacific Gypsum LLC

Address

133 Peachtree Street, NE
Atlanta, GA 30303

Telephone

Technical Information: 800.225.6119
(M)SDS Request: 404.652.5119

E-mail

MSDSREQ@GAPAC.com

Emergency phone number

Chemtrec - Emergency: 800.424.9300

2. Hazard identification

Emergency overview

This product qualifies as a manufactured article, as defined in the Hazardous Products Act (HPA), and is exempt from the HPA's Hazard Communication Standard. However, this Voluntary Product Information Statement contains valuable information for the safe handling and proper use of the product. It is recommended to retain the SDS and make it accessible to employees and other individuals utilizing this product.

Physical hazards

Not classified.

Health hazards

Not classified.

Environmental hazards

Not classified.

Label elements

Hazard symbol

None.

Signal word

None.

Hazard statement

The mixture does not meet the criteria for classification.

Precautionary statement

Prevention	Wash thoroughly after handling. Observe good industrial hygiene practices.
Response	Wash hands after handling. Get medical advice/attention if you feel unwell.
Storage	Store away from incompatible materials (see Section 10 of the SDS).
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental information None.

Other hazards None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE*		10101-41-4	65 - 85
LIMESTONE (CALCIUM CARBONATE)		1317-65-3	3 - 7
VERMICULITE**		1318-00-9	0 - 10
CONTINUOUS FILAMENT GLASS FIBER		65997-17-3	1 - 5
Kaolin		1332-58-7	1 - 5
Other components below reportable levels			0.5 - 1.5

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments ** Found in products in List B, Section 1 of this SDS.

*Gypsum (calcium sulfate dihydrate) contains naturally occurring crystalline silica as an impurity, generally of the quartz form. As further indicated in Section 11, exposure to respirable crystalline silica from occupational sources is listed by IARC and NTP as a lung carcinogen. Testing conducted by Georgia-Pacific and other gypsum wallboard manufacturers using generally accepted industrial hygiene practices with both personal and area sampling did not detect respirable crystalline silica during activities associated with normal use of this product (i.e., cutting the product by "score and snap", hand saw or rotary saw). However, good ventilation and workplace practices should be used to minimize dust, and industrial hygiene monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded. See Section 8 for occupational exposure limits and additional information.

4. First-aid measures

Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Skin contact	If irritation develops, wash with soap and water. Get medical attention if irritation persists.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	May result in obstruction and irritation if ingested. Get medical attention.
Most important symptoms/effects, acute and delayed	Dusts may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS. Avoid inhalation of dust from the spilled material. In the case of dust or aerosol formation use respirator with an approved filter. Use personal protection recommended in Section 8. Keep unnecessary personnel away.

Methods and materials for containment and cleaning up Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. This product is slightly soluble in water. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Practice good housekeeping. Provide appropriate exhaust ventilation at places where dust is formed. Minimise dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.

Conditions for safe storage, including any incompatibilities Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	3 mg/m ³	Respirable particles.
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	TWA	5 mg/m ³	Inhalable fraction.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	3 mg/m ³	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	TWA	3 mg/m ³	Respirable particles.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	10 mg/m ³	Inhalable fraction.
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	TWA	1 fibers/cm ³	Fiber.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m3	Inhalable particles.
Silica-crystalline, quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	TWA	10 mg/m3	Inhalable particles.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	10 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m3	
Silica-crystalline, quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
VERMICULITE** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	Total

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	STEL	20 mg/m3	Total dust.
	TWA	10 mg/m3	Inhalable
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	STEL	20 mg/m3	Total dust.
	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m3	Inhalable particles.
Silica-crystalline, quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended

Components	Type	Value	Form
VERMICULITE** (CAS 1318-00-9)	TWA	10 mg/m3	Inhalable particles.

Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Silica-crystalline, quartz (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	TWA	0.5 fibers/cc	Respirable fibers.
		5 mg/m3	Inhalable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Silica-crystalline, quartz (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
VERMICULITE** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	TWA	10 mg/m3	Total dust.
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable dust.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m3	Total dust.
Silica-crystalline, quartz (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
VERMICULITE** (CAS 1318-00-9)	TWA	10 mg/m3	Total dust.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	15 minute	20 mg/m3	
	8 hour	10 mg/m3	
Kaolin (CAS 1332-58-7)	15 minute	4 mg/m3	Respirable fraction.
	8 hour	2 mg/m3	Respirable fraction.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended

Components	Type	Value	Form
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	15 minute	20 mg/m ³	
	8 hour	10 mg/m ³	
Silica-crystalline, quartz (CAS 14808-60-7)	8 hour	0.05 mg/m ³	Respirable fraction.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

*Testing conducted by Georgia-Pacific and other gypsum wallboard manufacturers using generally accepted industrial hygiene practices with both personal and area sampling did not detect respirable crystalline silica during activities associated with normal use of this product (i.e., cutting the product by "score and snap", hand saw or rotary saw). However, good ventilation and workplace practices should be used to minimize dust, and industrial hygiene monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn. Score and snap method recommended.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Safety glasses or goggles are recommended when using this product. Eye wash fountain is recommended.

Skin protection**Hand protection**

Protective gloves are recommended.

Other

Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Safety shower/eye wash fountain is recommended in the workplace area.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards

Not applicable.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Keep away from food and drink.

9. Physical and chemical properties**Physical state**

Solid.

Form

Solid.

Colour

Facing color varies

Odour

Odourless.

Melting point/freezing point

1450 °C (2642 °F) estimated / Not applicable.

Boiling point or initial boiling point and boiling range

Not applicable.

Flammability

Not available.

Upper/lower flammability or explosive limits**Explosive limit - lower (%)**

Not applicable.

Explosive limit – upper (%)

Not applicable.

Flash point

Not applicable.

Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
pH	7
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	0.2 % @ 22°C
Partition coefficient (n-octanol/water) (log value)	Not applicable.
Vapour pressure	Not applicable.
Density and/or relative density	Not available.
Vapour density	Not applicable.
Particle characteristics	Not available.
Other information	
Evaporation rate	Not available.
Explosive properties	Not explosive.
Flash point class	Not flammable
Oxidising properties	Not oxidising.
Specific gravity	> 2.2 - < 2.4
Viscosity	Not applicable.

10. Stability and reactivity

Reactivity	Contact with strong acids produces carbon dioxide.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Acids.
Hazardous decomposition products	May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Dust may irritate the eyes. Dust generated during processing may cause eye irritation.
Ingestion	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)		
Acute		
Oral		
LD50	Rat	> 1581 mg/kg

Components	Species	Test Results
Kaolin (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)		
Acute		
Oral		
LD50	Rat	6450 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Dust generated during processing may cause eye irritation.	
Respiratory or skin sensitisation		
Canada - Alberta OELs: Irritant		
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)	Irritant	
Kaolin (CAS 1332-58-7)	Irritant	
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	Irritant	
VERMICULITE** (CAS 1318-00-9)	Irritant	
Respiratory sensitisation	Not likely to cause respiratory sensitization.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	Not expected to be hazardous by OSHA/WHMIS criteria.	
<p>Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.</p>		
ACGIH Carcinogens		
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	A2 Suspected human carcinogen.	
Kaolin (CAS 1332-58-7)	A4 Not classifiable as a human carcinogen.	
Silica-crystalline, quartz (CAS 14808-60-7)	A4 Not classifiable as a human carcinogen.	
Canada - Alberta OELs: Carcinogen category	A2 Suspected human carcinogen.	
Silica-crystalline, quartz (CAS 14808-60-7)	Suspected human carcinogen.	
Canada - Manitoba OELs: carcinogenicity		
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)	Not classifiable as a human carcinogen.	
Kaolin (CAS 1332-58-7)	Suspected human carcinogen.	
Silica-crystalline, quartz (CAS 14808-60-7)	Not classifiable as a human carcinogen.	
Canada - Quebec OELs: Carcinogen category	Suspected human carcinogen.	
Silica-crystalline, quartz (CAS 14808-60-7)	Suspected carcinogenic effect in humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Silica-crystalline, quartz (CAS 14808-60-7)	1 Carcinogenic to humans.	
US. National Toxicology Program (NTP) Report on Carcinogens		
Silica-crystalline, quartz (CAS 14808-60-7)	Known To Be Human Carcinogen.	
Reproductive toxicity	Not classified.	

Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Not hazardous under normal conditions of use.
Further information	*Testing conducted by Georgia-Pacific and other gypsum wallboard manufacturers using generally accepted industrial hygiene practices with both personal and area sampling did not detect respirable crystalline silica during activities associated with normal use of this product (i.e., cutting the product by "score and snap", hand saw or rotary saw). However, good ventilation and workplace practices should be used to minimize dust, and industrial hygiene monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

12. Ecological information

Ecotoxicity Not considered to be harmful to aquatic life.

Product	Species	Test Results	
Glass Mat Faced Gypsum Panels			
Aquatic			
Crustacea	EC50	Daphnia	12133.8916 mg/l, 48 hours estimated
Fish	LC50	Fish	36247.6055 mg/l, 96 hours estimated
<i>Acute</i>			
Crustacea	EC50	Daphnia	8734.5117 mg/l, 48 hours estimated
Fish	LC50	Fish	1827.1508 mg/l, 96 hours estimated
Components			
Species			
Test Results			
CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
			> 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 1000 mg/l, 96 hours ECHA
Silica-crystalline, quartz (CAS 14808-60-7)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Not available.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR. This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada Controlled Drugs and Substances Act, Schedule I

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule II

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule III

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule IV

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule V

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule VI

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule VII

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule VIII

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not listed.

Rotterdam Convention

Not listed.

Kyoto Protocol

Not listed.

Montreal Protocol

Not applicable.

Basel Convention

CALCIUM SULFATE DIHYDRATE* (CAS 10101-41-4)
CONTINUOUS FILAMENT GLASS FIBER (CAS 65997-17-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 03-24-2017

Revision date 07-29-2025

Version No. 04

Further information HMIS® is a registered trade and service mark of the NPCA.

Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

1. Identification

Product identifier	GlasRoc® Sheathing
Other means of identification	
Product identifier	1/2" GlasRoc® Sheathing, 5/8" GlasRoc® Sheathing, 1/2" GlasRoc® Sheathing CarbonLow™, 5/8" GlasRoc® Sheathing CarbonLow™
Synonyms	Gypsum Panels
Recommended use	Gypsum panel product for exterior wall applications.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Company name	CertainTeed Gypsum
Address	20 Moores Road Malvern, PA 19355 United States of America
Telephone	1-800-233-8990
Website	www.certainteed.com
Emergency telephone	3E Global Incident Response Hotline +1 760 476 3962 +1 866 519 4752 (Toll Free) Access Code: 336250

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate	10101-41-4	80 - 100
Continuous filament glass fiber	65997-17-3	1 - 5

Composition comments The exact concentrations of the above listed chemicals are being withheld as a trade secret. All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.

Raw material in this product contains respirable crystalline silica as an impurity. Independent testing of this product suggests that under most conditions of use, this product will not result in exposure to respirable crystalline silica that exceeds OSHA's Action Level, (AL) or Permissible Exposure Limit (PEL). However, actual concentrations of respirable silica may vary based on the conditions of use. Specific exposures can only be determined by workplace industrial hygiene testing.

<https://www.certainteed.com/drywall/osha-crystalline-silica-techupdate-certainteed-gypsum-board-products>

4. First-aid measures

Inhalation

In case of inhalation of dust: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

No restrictions known.

Specific hazards arising from the chemical

During fire, hazardous combustion products are released that may include: Sulfur oxides. Fumes of metal oxides.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Pick up and arrange disposal without creating dust. Collect dust using a vacuum cleaner equipped with HEPA filter. Recover and recycle, if practical. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a dry place. Protect from weather and prevent exposure to sustained moisture. Protect from direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 10101-41-4)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

Materials generated during handling	Type	Value	Form
Dust	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

ACGIH Materials generated during handling	Type	Value	Form
Dust	TWA	10 mg/m3	Inhalable particles.

US. ACGIH Threshold Limit Values (TLV) Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.

Materials generated during handling	Type	Value	Form
Dust	TWA	3 mg/m3	Respirable particles.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Unvented, tight fitting goggles should be worn in dusty areas.

Skin protection

Hand protection

Wear suitable protective gloves to prevent cuts and abrasions. Suitable gloves can be recommended by the glove supplier.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Follow OSHA respirator regulations (29CFR 1910.134) and use NIOSH/MSHA approved respirators. Appropriate respirator selection should be made by a qualified professional.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Color	White.

Odor	Odorless.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non flammable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not applicable, product is a mixture.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Decomposition is not expected under normal conditions of use and storage. In the event of fire: See Section 5.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	May cause irritation through mechanical abrasion.
Serious eye damage/eye irritation	Airborne dust may cause mechanical eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.

Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil The product is insoluble in water. Not expected to be mobile in soil.

Other adverse effects No data available for this product.

13. Disposal considerations

Disposal instructions Recover and reclaim or recycle, if practical. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No**SARA 313 (TRI reporting)**

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (CAS 10101-41-4)

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Calcium sulfate dihydrate (CAS 10101-41-4)

California Proposition 65California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision**Issue date** 08-September-2023

Revision date 03-April-2025
Version # 02
Revision notes Section 1: Identification- Product Identifier
Further information E - Safety Glasses, Gloves, Dust Respirator
HMIS® ratings Health: 0
Flammability: 1
Physical hazard: 0
Personal protection: E

Disclaimer CertainTeed Gypsum cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.



US-OSHA SAFETY DATA SHEET-SOFT LEAD

SECTION 1, IDENTIFICATION

Product Name: Soft Lead

Synonyms: corroding grade lead, pure lead, lead metal, granular; lead metal, foil; lead metal, sheet; lead metal, shot, sheet lead, strip lead, lead plate, lead flashings, plumbing lead, lead ingot, lead pigs, lead pipe, lead bends, lead wire, came lead, lead extrusions, lead bricks, lead wool, lead anodes, bullet lead, lead bullets, lead billets, lead castings, machined lead, ballast lead, other miscellaneous lead products. Powder-coated lead products and painted lead products.

Recommended Uses: Roofing, non-potable plumbing, radiation shielding, ballast, nuclear shielding, etc.

Uses Advised Against: Jewelry, toys, potable plumbing

CAS No: 7439-92-1

Chemical Formula: Pb

RTECS: OF7525000

TSCA: TSCA 8(b) inventory: Lead

CI#: Not available.

Chemical Name: Lead

Contact Information:

Radiation Protection Products, Inc.
P.O. Box 862
1000 Superior Boulevard, Suite 310
Wayzata, MN 55391

Phone: 1.888.746.4777 (RINGRPP)

Sales: 1.888.746.4777 (RINGRPP)

Website: www.radiationproducts.com

SECTION 2, HAZARD(S) IDENTIFICATION

DANGER

Hazard Statements:

Lead – May cause cancer.

May damage fertility or the unborn child.

May cause harm to breast-fed children.

Cause damage to central nervous system, blood formation and kidneys and cardiovascular system through prolonged or repeated exposure.



Antimony – Dust or fume will be irritant.

Antimony causes nasal septal ulceration and stomach lining irritation.

Appearance: Gray with bluish or silvery cast depending on alloy.

POTENTIAL HEALTH EFFECTS

Inhalation: When scattered in the air as a dust, fume or mist, it may be inhaled (breathed) and absorbed through the lungs and upper respiratory tract irritation and it can result in both acute and chronic overexposure.

Ingestion: When it gets into the mouth and is swallowed, it may be absorbed through the digestive system and can result in both acute and chronic overexposure.

Skin Contact: Dust, fume or mist, are not readily absorbed through the skin; however, they may cause mechanical irritation to the skin.

Eye Contact: Dust, fume or mist may cause mechanical irritation.

SIGNS & SYMPTOMS OF OVEREXPOSURE

Acute (short term) exposure: If left untreated—weakness, vomiting, loss of appetite, uncoordinated body movements, convulsions, stupor, bloody stools, and possible coma.

Chronic (long term) exposure: If left untreated—weakness, insomnia, hypertension, slight irritation to skin and eyes, metallic taste in mouth, anemia, constipation, headache, muscle and joint pains, neuromuscular dysfunction, possible paralysis and encephalopathy. Lead and its inorganic compounds are neurotoxins that may produce peripheral neuropathy. For an overview of the effects of lead exposure, see OSHA 29CFR1910.1025, Appendix A.

SECTION 3, COMPOSITION/INFORMATION ON INGREDIENTS

Material:	% by Weight:	CAS #:
Lead	99.9+%	7439-92-1

Toxicological Data on Ingredients: Lead LD50: Not available. LC50: Not available.

SECTION 4, FIRST-AID MEASURES

Inhalation: Remove from exposure. Get medical attention if experiencing affects of overexposure.

Ingestion: Get immediate medical attention.

Eyes: Flush with large quantities of water. Get immediate medical attention.

Skin: Wash thoroughly with soap and water.

SECTION 5, FIRE-FIGHTING MEASURES

Flash Point: Not Applicable

Fire Extinguishing Media: Dry chemical or carbon dioxide should be used on surrounding fire. DO NOT use water on fires where molten metal is present.

Special Fire Fighting Precautions: Use approved full-face-piece, self-contained breathing apparatus and full protective clothing if involved in a fire.

Unusual Fire and Explosion Hazard: Molten metals produce fume, dust or mist that may be toxic.

SECTION 6, ACCIDENTAL RELEASE MEASURES

Spill or Leak: Dust or particulate should be vacuumed or wet swept where vacuuming is infeasible. Place material in dry, closed containers for disposal or recycling. Do not use compressed air or dry sweeping for cleaning. Use approved respiratory protection if dust/fume exposure possibility exists.

SECTION 7, HANDLING AND STORAGE

Storage: Store in a dry area where accidental contact with hydrogen peroxide is not possible.

Other Special Precautions/Procedures: Wash hands, face, neck and arms thoroughly before eating or smoking. Eating and smoking should be confined to non-contaminated areas. Work clothes and equipment should remain in designated contaminated areas, and should never be taken home or laundered with personal clothing. Do not use compressed air for blowing dust off of clothes.

Before using the product, consult the OSHA Federal Standard for Occupational Exposure to Lead 29CFR1910.1025.

SECTION 8, EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Limit: 0.05 mg/meter (OSHA)

Ventilation: Local exhaust ventilation shall be provided in areas where exposures are above the permissible limits or threshold limit values specified by OSHA or other local, state, and federal regulations.

Respiratory Protection: Use of approved (OSHA 29CFR1910.1025 (f)) respirators is required for applications where adequate ventilation cannot be provided.

Eyes and Face: Face shields or vented goggles should be used around molten metal. Safety glasses should be used for operations generating flying pieces.

Gloves: Gloves should be worn when handling the product.

Other Clothing and Equipment: Full protective clothing is required if the permissible exposure limit is exceeded. Hard hat, safety shoes, and other safety equipment should be worn as appropriate for the environment.

SECTION 9, PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Silver-gray metal, odorless. Various shapes and sizes.

Molecular Weight: 207.2

Boiling Point: Greater than 3164°F (1740°C)

Vapor Density: Not Applicable

Vapor Pressure: Not Applicable

% Volatiles by Volume: Not Applicable

Specific Gravity (H₂O=1): 11.34

Melting Point: 621°F (327°C)

Solubility in Water: Insoluble

Evaporation Rate: Not Applicable

SECTION 10, STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Not Applicable

Hazardous Polymerization: Not Applicable

SECTION 11, TOXICOLOGICAL INFORMATION

Routes of Entry: Absorbed through skin. Inhalation. Ingestion.

Biological Limit for Lead: 50 micrograms lead/100 grams whole blood.

SECTION 12, ECOLOGICAL INFORMATION

Precautions should be taken to prevent the release of lead into the environment. Lead may bioaccumulate to some extent.

SECTION 13, DISPOSAL CONSIDERATIONS

Waste Disposal Method: Material should be recycled if at all possible. Collection, transportation, and storage should be in accordance with federal, state and local laws.

SECTION 14, TRANSPORT INFORMATION

Lead metal is not a DOT regulated material.

SECTION 15, REGULATORY INFORMATION

FEDERAL AND STATE REGULATIONS

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Lead California prop. 65 (no significant risk level): Lead: 0.0005 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead Connecticut hazardous material survey.: Lead Illinois toxic substances disclosure to employee act: Lead Illinois chemical safety act: Lead New York release reporting list: Lead Rhode Island RTK hazardous substances: Lead Pennsylvania RTK: Lead

OTHER REGULATIONS

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

OTHER CLASSIFICATIONS

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):

R20/22- Harmful by inhalation and if swallowed. R33- Danger of cumulative effects. R61- May cause harm to the unborn child. R62- Possible risk of impaired fertility. S36/37- Wear suitable protective clothing and gloves. S44- If you feel unwell, seek medical advice (show the label when possible). S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):**Health Hazard: 1****Fire Hazard: 0****Reactivity: 0****Personal Protection: E****National Fire Protection Association (U.S.A.):****Health: 1****Flammability: 0****Reactivity: 0****Specific hazard:****Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

SECTION 16, OTHER INFORMATION**Created:** September 25, 2014**Updated:** March 1, 2016

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Radiation Protection Products, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Radiation Protection Products, Inc. has been advised of the possibility of such damages.



SAFETY DATA SHEET

1. Identification

Product identifier	DUROCK® Cement Board (with or without EdgeGuard™)
Other means of identification	
SDS number	14000010001
Synonyms	Cement Underlayment Board, Cement Panels
Recommended use	Interior or exterior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer/Importer/Supplier/Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 1A
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	
Label elements		

Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Portland cement	65997-15-1	< 50
Fly ash	68131-74-8	< 20
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	< 10
Perlite	93763-70-3	< 10
Continuous filament glass fiber	65997-17-3	< 5

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 0.7

Composition comments

Occupational Exposure Limits for impurities are listed in Section 8. All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.7%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in eyes: Flush with cold tap water for at least 15 minutes. If irritation persists, seek medical attention immediately.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

May cause chemical eye burns. Permanent eye damage including blindness could result. Dust may cause skin, eye, throat and respiratory system irritation and cause coughing.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage**Precautions for safe handling**

Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wash hands after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store all DUROCK® Panels flat. Store in an enclosed materials shelter providing protection from damage and exposure to the elements.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Components	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Portland cement (CAS 65997-15-1)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.
		2.4 mppcf	Respirable.
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
Portland cement (CAS 65997-15-1)	TWA	15 mppcf	Respirable fraction.
		50 mppcf	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m ³	Inhalable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm ³	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.
Portland cement (CAS 65997-15-1)	TWA	1 mg/m ³	Respirable fraction.
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm3	Respirable fibers ($\leq 3.5 \mu\text{m}$ in diameter & $\geq 10 \mu\text{m}$ in length)
		3 fibers/cm3	Fibrous dust.
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	5 mg/m3	Fiber, total
		0.05 mg/m3	Respirable dust.
		5 mg/m3	Respirable.
Perlite (CAS 93763-70-3)	TWA	10 mg/m3	Total
		5 mg/m3	Respirable.
		10 mg/m3	Total
Portland cement (CAS 65997-15-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear approved safety goggles.

Skin protection**Hand protection**

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection**Other**

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards

None.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Board.

Color

Gray.

Odor

Low to no odor.

Odor threshold

Not applicable.

pH

12

Melting point/freezing point

Not applicable.

Initial boiling point and boiling range

Not applicable.

Flash point

Not applicable.

Evaporation rate

Not applicable.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits**Flammability limit - lower (%)**

Not applicable.

Flammability limit - upper (%)

Not applicable.

Explosive limit - lower (%)

Not applicable.

Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	0.8 - 1.2 (H ₂ O=1)
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	60 - 65 lb/ft ³
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Calcium oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Dust can be irritating to skin.
Eye contact	Causes serious eye damage.
Ingestion	Ingestion may cause irritation and stomach discomfort.

Symptoms related to the physical, chemical and toxicological characteristics May cause chemical eye burns. Permanent eye damage or blindness could result. Dust may irritate eyes, skin, throat and upper respiratory system and cause coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Causes skin irritation. Dust can cause skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization	Not a sensitizer.
Skin sensitization	Trace amounts of Cr(VI) compounds from Portland Cement may cause allergic skin reaction even after one exposure.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7) Cancer

Reproductive toxicity Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure May cause respiratory irritation.
Specific target organ toxicity - repeated exposure Not classified. For detailed information, see section 16.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic		
Fish	LC50 Fathead minnow (<i>Pimephales promelas</i>)	> 1970 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7) Cancer

lung effects
immune system effects
kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Classified hazard categories Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

US. Rhode Island RTK

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

California Proposition 65



WARNING: This product can expose you to chemicals including Crystalline silica (Quartz), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (Quartz) (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No - Exempt

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-March-2014

Revision date 10-March-2023

Version # 03

Further information Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:
Health: 2
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings



Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

PermaBASE® Cement Board Products

IDENTIFIERS

PermaBASE® Cement Board
PermaBASE UltraBacker® Cement Board
PermaBASE WP™ Waterproof Cement Board
PermaBASE Plus® Cement Board
PermaBASE® 1/4" Underlayment

OTHER MEANS OF IDENTIFICATION

Tile Backer Board, Cementitious Backer Board (CBU)

RECOMMENDED USE

Underlayment for ceramic tile on floors, countertops, EIFS systems. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

PermaBASE Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: permabase.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by PermaBASE Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Carcinogenicity - Category 1A - (H-350)
Specific target organ toxicity, repeated exposure – Category 1 (H-372)
Acute toxicity, inhalation - Category 4 (H-332)
Skin corrosion/irritation Category 2 (H315)
Serious eye irritation – Category 1 (H-318)

PICTOGRAM



SIGNAL WORD

Health Hazard Corrosive

HAZARD STATEMENTS

May cause cancer
Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.
Causes skin irritation and serious eye irritation.

PRECAUTIONARY STATEMENTS

PREVENTION

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water. If skin irritation occurs, get medical attention.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Silicon Dioxide (SiO ₂)	Sand, quartz	14808-60-7	<50	
Mixture-calcium and aluminum silicates	Portland Cement	65997-15-1	<25	Crystalline silica (CAS # 14808-60-7)
Mixture-silicates, aluminates	Pozzolan, fly ash	68131-74-8	<25	Crystalline silica (CAS # 14808-60-7)
Mixture-silicates, aluminates	High Alumina Cement	65997-16-2	<6	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass scrim or fiberglass mat laminate	65997-17-3	<5	
Calcium Hydroxide	Hydrated lime	1395-62-0	<2	Crystalline silica (CAS # 14808-60-7)

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

See Section 11 - Toxicological Information

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Product is an article composite.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8). Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product could be toxic to fish due to its high alkalinity from the Portland Cement.

Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Pick-up larger pieces to avoid a tripping hazard.

Sweep or vacuum remaining material into a waste container for disposal.

Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Store panels flat to minimize damage and warping. Do not stack panels too high when storing to minimize the risk of falling. Avoid contact with strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Limits

COMPONENT	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Portland Cement	15 ^(T) 5 ^(R)	10 ^(T)
High Alumina Cement	15 ^(T) 5 ^(R)	10 ^(T)
Pozzolan	15 ^(T) 5 ^(R)	10 ^(T)
Sand	$[(10) / (\%SiO_2+2)]^{(R)}$ $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 ^(R)
Crystalline Silica (Quartz) ¹	$[(10) / (\%SiO_2+2)]^{(R)}$ $[(30) / (\%SiO_2+2)]^{(T)}$	0.025 ^(R)
Fiberglass Scrim	15 ^(T) 5 ^(R)	1 f/cc ^(R)
Calcium Hydroxide (Hydrated Lime)	15 ^(T) 5 ^(R)	5 ^(R)
Calcium Carbonate	15 ^(T) 5 ^(R)	10 ^(T)

T - Total Dust R - Respirable Dust 1 - Present as an impurity in raw materials.

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production such as cutting with a standard utility knife.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- a. **Appearance:** Gray Solid
- b. **Odor:** Slight organic odor upon opening that dissipates quickly.
- c. **Odor threshold:** Not available
- d. **pH:** ~12
- e. **Melting point/freezing point:** Not Available
- f. **Initial boiling point and boiling range:** Not Available
- g. **Flash point:** Not available
- h. **Evaporation rate:** Not available
- i. **Flamability (solid, gas):** Not flammable
- j. **Upper/lower flammability or explosive limits:** Not available
- k. **Vapor pressure:** Not available
- l. **Vapor density:** Not available
- m. **Relative density:** ~1.2
- n. **Solubility(ies):** Slightly soluble in water
- o. **Partition coefficient: n-octanol/water:** Not available
- p. **Auto-ignition temperature:** Not available
- q. **Decomposition temperature:** Unknown
- r. **Viscosity:** Not available
- s. **Volatile organic compound (VOC) content:** N/A

SECTION 10: STABILITY AND REACTIVITY

- a. **Reactivity:** No data available
- b. **Chemical stability:** Stable in dry environments
- c. **Possibility of hazardous reactions:** None known
- d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** Contact with strong acids
- e. **Incompatible materials:** Strong acids
- f. **Hazardous decomposition products:** None known

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION May cause gastrointestinal irritation.

INHALATION Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT May cause irritation, dry skin or dermatitis.

EYE CONTACT May cause mechanical irritation. (See below)

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease (Silicosis and/or lung cancer). Contact with wet Portland Cement may cause severe irritation, redness, and possible burns. Continued and prolonged contact may result in drying of the skin. Contact with dust or glass fibers may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY: Portland Cement LD50/CL50 = not available. Crystalline Silica (sand/quartz) = LD50 oral rat >22,500 mg/kg.

SKIN CORROSION/IRRITATION: Not available

SERIOUS EYE DAMAGE/EYE IRRITATION: Not available

SKIN SENSITIZATION: Not available

RESPIRATORY SENSITIZATION: Not available

SENSITIZATION: Not available

MUTAGENICITY: Not available

CARCINOGENICITY: Not available

This product contains crystalline silica (quartz). The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen.

REPRODUCTIVE EFFECTS: Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: Not available

ASPIRATION TOXICITY: Not available

SECTION 12: ECOLOGICAL INFORMATION

- Ecotoxicity (aquatic and terrestrial, where available):** This product could be toxic to fish due to its high alkalinity from the Portland Cement. No studies are available.
- Persistence and degradability:** Unknown
- Bioaccumulative potential:** Unknown
- Mobility in soil:** Unknown
- Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

Canada WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

PermaBASE Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

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National Gypsum Company is the exclusive service provider for products manufactured by PermaBASE Building Products, LLC.

PermaBASE®
Building Products

PermaBASE Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
permabase.com

WALLBOARD FINISHING

- 1. JOINT TAPE**
- 2. FINISHING MUDS**
- 3. SPRAY TEXTURE**



SAFETY DATA SHEET

1. Identification

Product identifier	USG Sheetrock® Brand Fast Finish Paper Joint Tape
Other means of identification	
SDS number	61111000004
Synonyms	Joint Tape, Paper Tape
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer/Importer/Supplier/Distributor information	
Company name	United States Gypsum Company
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First-aid measures

Inhalation	Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.
Skin contact	Direct, prolonged or repeated contact with the skin may cause irritation. Contact along a length of the edge of the paper may result in a paper cut of the skin. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area.
Eye contact	Direct contact can cause irritation of eyes. Immediately flush eye(s) with plenty of water. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.
Ingestion	Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.

Most important symptoms/effects, acute and delayed	May cause mechanical irritation of skin and eyes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Alcohol foam. Polymer foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store away from incompatible materials. Protect product from physical damage.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Ventilation is not normally required.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Skin protection	
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	Not necessary under normal conditions.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Paper tape.
Color	White.

Odor	Low to no odor.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not applicable.
Solubility(ies)	
Solubility (water)	Not applicable.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	0.03 lb/ft ²

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not likely, due to the form of the product.
Skin contact	Direct, prolonged or repeated contact with the skin may cause irritation.
Eye contact	Direct contact may cause mechanical irritation of the eyes.
Ingestion	Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.

Symptoms related to the physical, chemical and toxicological characteristics May cause mechanical irritation of skin and eyes.

Information on toxicological effects

Acute toxicity	None known.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization No data available.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity Not expected to be mutagenic.

Carcinogenicity Not expected to cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure No data available, but none expected.

Specific target organ toxicity - repeated exposure No data available, but none expected.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Further information No other specific acute or chronic health impact noted.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.

Persistence and degradability This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil The product is not mobile in soil.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

All components of this product are in compliance with the listing Requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

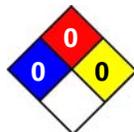
Issue date 27-May-2016

Revision date -

Version # 01

Further information NFPA Ratings: 0
Health:
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings



List of abbreviations NFPA: National Fire Protection Association.

References HSDB® - Hazardous Substances Data Bank

Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier SHEETROCK® Brand All Purpose Joint Compound, TOTAL™, Ready-Mixed

Other means of identification

SDS number 61000010013

Synonyms Joint Compound (Ready-Mixed) , Taping Compound, Mud, Finishing Compound

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 60
Attapulgite	12174-11-7	< 5
Perlite	93763-70-3	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.7%. The OSHA PEL for respirable crystalline silica has been lowered to 0.05 mg/m3, effective June 23, 2016 with compliance dates of June 23, 2017 for construction and June 23, 2018 for general industry. Testing of this product and its constituents suggests that under normal conditions the expected use of this product will not result in exposure to respirable crystalline silica that exceeds the OSHA PEL. However, actual exposures to respirable crystalline silica on a given jobsite must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. May cause allergic skin disorders in sensitive individuals.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use. Filled 4.5 gallon pails of joint compound may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high. Filled cartons of joint compound may be stacked a maximum of 3 layers high on a standard 42 x 42 or 42 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
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Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state	Semi-solid.
Form	Paste.
Color	Off-white.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	7.5 - 9.9
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	1.4 - 1.8 (H ₂ O=1)
Solubility(ies)	Soluble in water.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	12 - 15 lb/gal
VOC (Weight %)	2 g/l (Calculated by EPA Method 24)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	Above 1472°F (800°C) limestone (CaCO ₃) can decompose to lime (CaO) and release carbon dioxide (CO ₂).

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed.
Inhalation	Airborne dust may irritate throat and upper respiratory system causing coughing.
Skin contact	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
Eye contact	Airborne dust may cause mechanical eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not expected to increase the risk of cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgite (CAS 12174-11-7)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
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Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged exposure may cause chronic effects. For detailed information, see section 16.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data available.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	No data available.
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Limestone (CAS 1317-65-3)

Perlite (CAS 93763-70-3)

US. New Jersey Worker and Community Right-to-Know Act

Limestone (CAS 1317-65-3)

Perlite (CAS 93763-70-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Limestone (CAS 1317-65-3)

Perlite (CAS 93763-70-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)

International Inventories

All components of this product are in compliance with the listing Requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. Other information, including date of preparation or last revision

Issue date 21-January-2014

Revision date 02-March-2017

Version # 03

Further information

Attapulgit: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure per ACGIH.

Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is within the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Bucket NFPA Classification:

Health: 0

Flammability: 1

Physical hazard: 0

NFPA Ratings:

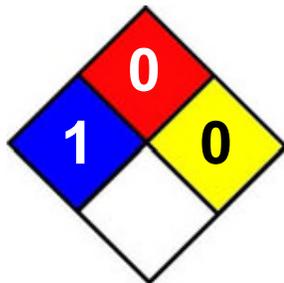
Health: 1

Flammability: 0

Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings



List of abbreviations

NFPA: National Fire Protection Association.

References

Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier	SHEETROCK® Brand EASY SAND™ Lightweight Setting-Type Joint Compound, 5, 20, 45, 90, 210	
Other means of identification		
SDS number	61000030002	
Synonyms	Joint Compound, Finishing Compound, Taping Compound, Mud	
Recommended use	Interior use.	
Recommended restrictions	Use in accordance with manufacturer's recommendations.	
Manufacturer/Importer/Supplier/Distributor information		
Company name	United States Gypsum Company	
Address	550 West Adams Street Chicago, Illinois 60661-3637	
Telephone	1-800-874-4968	
Website	www.usg.com	
Emergency phone number	1-800-507-8899	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Carcinogenicity (inhalation)	Category 1A
	Specific target organ toxicity, repeated exposure	Category 2 (Lung)
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger	
Hazard statement	May cause cancer by inhalation. May cause damage to organs (Lung) through prolonged or repeated exposure.	
Precautionary statement		
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	If exposed or concerned: Get medical advice/attention.	
Storage	Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	None.	

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1)	26499-65-0	< 60
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1)	1317-65-3 or 16389-88-1	< 50

Chemical name	CAS number	%
Attapulgite	12174-11-7	< 10
Perlite	93763-70-3	< 10
Calcium sulfate dihydrate	13397-24-5	< 2

Impurities

Chemical name	Common name and synonyms	CAS number	%
Crystalline silica (Quartz)		14808-60-7	< 1.5

Composition comments

All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 1.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

Most important symptoms/effects, acute and delayed

Dust may irritate throat and respiratory system and cause coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling

Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Impurities	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 13397-24-5)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 13397-24-5)	TWA	10 mg/m ³	Inhalable fraction.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m ³	Inhalable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 13397-24-5)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure. We recommend using wet sanding or vacuum sanding practices to reduce dust exposure.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Skin protection	
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties**Appearance**

Physical state	Solid.
Form	Powder.
Color	White to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 7.5 - 9.9

Melting point/freezing point Not applicable.

Initial boiling point and boiling range 212 °F (100 °C)

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density	0.6 - 0.7 (H ₂ O=1)
Solubility(ies)	
Solubility (water)	Slightly.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	35 - 45 lb/ft ³
VOC	None detected.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
Incompatible materials	Acids.
Hazardous decomposition products	Calcium oxides. Sulfur oxides. Silicon oxides. Above 1472°F (800°C) limestone (CaCO ₃) can decompose to lime (CaO) and release carbon dioxide (CO ₂).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Ingestion	Ingestion may cause irritation and stomach discomfort.

Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.
---	--

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	3 Not classifiable as to carcinogenicity to humans.
	1 Carcinogenic to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer
--	--------

Reproductive toxicity	Not expected to be a reproductive hazard.
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Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	May cause damage to organs (lung) through prolonged or repeated exposure.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.
Further information	No additional adverse health effects noted.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (CAS 13397-24-5)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 1970 mg/l, 96 hours
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 1970 mg/l, 96 hours

Persistence and degradability Calcium sulfate dissolves in water forming calcium and sulfate ions.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects
--	---

Toxic Substances Control Act (TSCA)

All components on the TSCA 8(b) inventory are designated "active" or are exempt from reporting under the Inventory Update Rule.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories	Carcinogenicity Specific target organ toxicity (single or repeated exposure)
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SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Calcium sulfate dihydrate (CAS 13397-24-5)
 Crystalline silica (Quartz) (CAS 14808-60-7)
 Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)
 Perlite (CAS 93763-70-3)
 Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate dihydrate (CAS 13397-24-5)
 Crystalline silica (Quartz) (CAS 14808-60-7)
 Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)
 Perlite (CAS 93763-70-3)
 Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (CAS 13397-24-5)
 Crystalline silica (Quartz) (CAS 14808-60-7)
 Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)
 Perlite (CAS 93763-70-3)
 Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Rhode Island RTK

Calcium sulfate dihydrate (CAS 13397-24-5)
 Crystalline silica (Quartz) (CAS 14808-60-7)
 Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)

California Proposition 65**WARNING:** This product can expose you to chemicals including Attapulgite, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Attapulgite (CAS 12174-11-7)	Listed: December 28, 1999
Crystalline silica (Quartz) (CAS 14808-60-7)	Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Attapulgite (CAS 12174-11-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 31-December-2013

Revision date 24-March-2021

Version # 04

Further information

Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure per ACGIH.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

ProForm® Joint Treatment Products & Ready Mix Joint Compounds

IDENTIFIERS

ProForm® All Purpose Joint Compound
ProForm® All Purpose Heavy Viscosity Joint Compound
ProForm® All Purpose Machine Grade Joint Compound
ProForm® All Purpose Texture Grade Joint Compound
ProForm® All Purpose with Dust-Tech® Joint Compound
ProForm® Concrete Cover Joint Compound
ProForm® Factory Built Housing Texture Grade Ready Mix Compound
ProForm® Lite Joint Compound
ProForm® Lite Blue® Joint Compound
ProForm® Lite Blue® with Dust-Tech® Joint Compound
ProForm® Lite Blue® with Tint Joint Compound
ProForm® Multi-Use Joint Compound
ProForm® Red River Tint™ Joint Compound
ProForm® Taping Lite Joint Compound
ProForm® Topping Joint Compound
ProForm® Ultra Lite® All Purpose Joint Compound
Advantage™ All Purpose Joint Compound
Easy Finish® Joint Compound

OTHER MEANS OF IDENTIFICATION

Joint Compound, Taping Compound, Gypsum Board Finishing Compound

RECOMMENDED USE

All-purpose drying-type compounds used for finishing gypsum board products. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: proformfinishing.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by ProForm Finishing Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Carcinogenicity - Category 1A (H-350)
Specific target organ toxicity, repeated exposure – Category 1 (H-372)
Acute toxicity, inhalation - Category 4 (H-332)
Skin corrosion/irritation - Category 2 (H-315)

PICTOGRAM



SIGNAL WORD

Health Hazard

HAZARD STATEMENTS

H-350 May cause cancer.
H-332, 372 Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.
H-315 Causes skin corrosion/irritation

PRECAUTIONARY STATEMENTS**PREVENTION**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use personal protective equipment as required. (See Section 8)
Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)
Calcium Carbonate or Calcium/Magnesium Carbonate	Limestone, Dolomite	1317-65-3 16389-88-11	>50
<i>And may contain one or more of the following:</i>			
Mixture-silicates and aluminates	Mica	12001-26-2	<10
Mixture-various metal oxides	Perlite	93763-70-3	<10
Magnesium aluminum phyllosilicate	Attapulgite Clay	12174-11-7	<5
Magnesium silicate	Sepiolite Clay	63800-37-3	<5
Magnesium aluminum phyllosilicate	Smectite Clay	1302-78-9	<5
Polyvinyl Acetate Latex		9003-20-7	<5
Ethylene Vinyl Alcohol		24937-78-8	less than 5%

SECTION 4: FIRST-AID MEASURES**INHALATION**

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES**EXTINGUISHING MEDIA**

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No special precautions required

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Shovel or scoop spilled material back into container for use, if possible, or disposal. Maintain proper ventilation to minimize dust. Avoid washing material down drains. This material will eventually set and can cause clogs.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing vapors when opening container. Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Keep from freezing to preserve usefulness. Keep containers closed when not in use. Avoid contact with strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Limits

COMPONENT	OSHA PEL mg/m ³	ACGIH TLV mg/m ³
Calcium Carbonate or Dolomite (limestone)	15 ^(T) 5 ^(R)	10 ^(T)
Mica	20 mppcf	3
Perlite	15 ^(T) 5 ^(R)	10 ^(T) 3 ^(R)
Attapulgite Clay	15 ^(T) 5 ^(R)	1 f/cc ^(R)
Sepiolite Clay	15 ^(T) 5 ^(R)	
Smectite Clay	15 ^(T) 5 ^(R)	
Crystalline Silica ¹	[(10 / (%SiO ₂ +2))] ^(R) [(30 / (%SiO ₂ +2))] ^(T)	
Polyvinyl Acetate Latex	NE	NE
Ethylene Vinyl Acetate Latex	NE	NE

T - Total Dust R - Respirable Dust 1 - Present as an impurity in raw materials NE - None Established mppcf - million particles per cubic foot

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible.

Utilize a light water spray when feasible.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- a. **Appearance:** A white to gray paste
- b. **Odor:** Mild latex initially, Low to none after opening.
- c. **Odor threshold:** Not available
- d. **pH:** 7-9
- e. **Melting point/freezing point:** Not Available
- f. **Initial boiling point and boiling range:** Not Available
- g. **Flash point:** Not available
- h. **Evaporation rate:** Not available
- i. **Flammability (solid, gas):** Not flammable
- j. **Upper/lower flammability or explosive limits:** Not available
- k. **Vapor pressure:** Not available
- l. **Vapor density:** Not available
- m. **Relative density:** ~1.0-1.8
- n. **Solubility(ies):** slightly soluble in water
- o. **Partition coefficient: n-octanol/water:** Not available
- p. **Auto-ignition temperature:** Not available
- q. **Decomposition temperature:** 825° C
- r. **Viscosity:** Not available
- s. **Volatile organic compound (VOC) content:** <2 g/l

SECTION 10: STABILITY AND REACTIVITY

- a. **Reactivity:** No data available
- b. **Chemical stability:** Stable in dry environments
- c. **Possibility of hazardous reactions:** None known
- d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- e. **Incompatible materials:** Strong acids
- f. **Hazardous decomposition products:** None known. Above 825° C limestone (CaCO₃) decomposes to calcium oxide (CaO) and carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Possible abdominal obstruction.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer).

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Not available

SKIN CORROSION/IRRITATION

Not available

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

Not available

RESPIRATORY SENSITIZATION

Not available

SENSITIZATION

Not available

MUTAGENICITY

Not available.

CARCINOGENICITY

Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE Not available

ASPIRATION TOXICITY Not available

SECTION 12: ECOLOGICAL INFORMATION

- a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
- b. **Persistence and degradability:** Unknown
- c. **Bioaccumulative potential:** Limestone is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
- d. **Mobility in soil:** Unknown
- e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

STATE REGULATIONS: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

CANADA WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A.

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.



National Gypsum Company is the exclusive service provider for products manufactured by ProForm Finishing Products, LLC.

PROFORM®
Finishing Products

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
proformfinishing.com

ProForm® Fast Setting Joint Compounds

SDS05001

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

ProForm® Fast Setting Joint Compounds

IDENTIFIERS

ProForm® FasTrack® Setting Compound
ProForm® FasTrack Plus® Setting Compound
ProForm® Quick Set™ Setting Compound
ProForm® Quick Set Lite™ Setting Compound
ProForm® Quick Set Lite™ Setting Compound 3 lb. bag
ProForm® Quick Set™ Fire and Smoke Stop 90 Setting Compound

OTHER MEANS OF IDENTIFICATION

Joint Compound, Taping Compound, Gypsum Board Finishing Compound

RECOMMENDED USE

Setting type (or hardening) joint compounds used in joint finishing and repair of drywall. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: proformfinishing.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by ProForm Finishing Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Carcinogenicity - Category 1A (H-350)
Specific target organ toxicity, repeated exposure – Category 1 (H-372)
Acute toxicity, inhalation - Category 4 (H-332)
Skin corrosion/irritation - Category 2 (H-315)

PICTOGRAM



SIGNAL WORD

Health Hazard

HAZARD STATEMENTS

H-350 May cause cancer.
H-332, 372 Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.
H-315 Causes skin corrosion/irritation

PROFORM®
Finishing Products

PRECAUTIONARY STATEMENTS

PREVENTION

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Calcium Sulfate Hemihydrate	Plaster of Paris, Stucco	10034-76-1	<70	Crystalline silica (CAS # 14808-60-7)
<i>And may contain one or more of the following:</i>				
Calcium Carbonate or Calcium/Magnesium Carbonate	Limestone, Dolomite	1317-65-3 16389-88-1	>10	
Mixture-silicates and aluminates	Mica	12001-26-2	<5	Crystalline silica (CAS # 14808-60-7)
Mixture-various metal oxides	Perlite	93763-70-3	<10	Crystalline silica (CAS # 14808-60-7)
Magnesium aluminum phyllosilicate	Attapulgate Clay	12174-11-7	<5	Crystalline silica (CAS # 14808-60-7)
Aluminum silicate hydroxide	Pyrophyllite	12269-78-2	<10	Crystalline silica (CAS # 14808-60-7)
Polyvinyl Acetate Latex		9003-20-7	<5	
Polyvinyl Alcohol		25213-24-5	<5	

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No special precautions required

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)

Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping. Maintain proper ventilation to minimize dust. Avoid washing material down drains. This material will eventually set and can cause clogs.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Keep containers closed when not in use. Avoid contact with strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Limits

COMPONENT	OSHA PEL mg/m ³	ACGIH TLV mg/m ³
Calcium Sulfate Hemihydrate (Plaster of Paris)	15 ^(T) 5 ^(R)	10 ^(T)
Calcium Carbonate or Dolomite (limestone)	15 ^(T) 5 ^(R)	10 ^(T)
Perlite	15 ^(T) 5 ^(R)	10 ^(T)
Mica	20 mppcf	3
Attapulgate Clay	15 ^(T) 5 ^(R)	10 ^(T)
Pyrophyllite	15 ^(T) 5 ^(R)	10 ^(T)
Crystalline Silica ¹	[(10) / (%SiO ₂ +2)] ^(R) ; [(30) / (%SiO ₂ +2)] ^(T)	0.025 ^(R)
Polyvinyl Acetate Latex	NE	NE
Ethylene Vinyl Alcohol	NE	NE

T - Total Dust R - Respirable Dust 1 - Present as an impurity in raw materials NE - None Established mppcf - million particles per cubic foot

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible. Utilize a light water spray when feasible.

Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- a. **Appearance:** A white to off-white powder
- b. **Odor:** None
- c. **Odor threshold:** Not available
- d. **pH:** 7-9
- e. **Melting point/freezing point:** Not Available
- f. **Initial boiling point and boiling range:** Not Available
- g. **Flash point:** Not available
- h. **Evaporation rate:** Not available
- i. **Flammability (solid, gas):** Not flammable
- j. **Upper/lower flammability or explosive limits:** Not available
- k. **Vapor pressure:** Not available
- l. **Vapor density:** Not available
- m. **Relative density:** ~2.5
- n. **Solubility(ies):** 2.1 g/L @ 20° C
- o. **Partition coefficient: n-octanol/water:** Not available
- p. **Auto-ignition temperature:** Not available
- q. **Decomposition temperature:** 825° C, 1450° C
- r. **Viscosity:** Not available
- s. **Volatile organic compound (VOC) content:** None

SECTION 10: STABILITY AND REACTIVITY

- a. **Reactivity:** No data available
- b. **Chemical stability:** Stable in dry environments
- c. **Possibility of hazardous reactions:** None known
- d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
- e. **Incompatible materials:** Strong acids
- f. **Hazardous decomposition products:** None known. Above 825° C limestone (CaCO₃) decomposes to calcium oxide (CaO) and carbon dioxide (CO₂). Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO₂) and various oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Possible abdominal obstruction.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer).

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley).

SKIN CORROSION/IRRITATION

Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404].

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

There is no indication of skin sensitization in guinea pigs [OECD TG 406].

RESPIRATORY SENSITIZATION

Not available

SENSITIZATION

Not available

MUTAGENICITY

No evidence of mutagenicity on Ames Test.

CARCINOGENICITY

Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE Not available

ASPIRATION TOXICITY Not available

SECTION 12: ECOLOGICAL INFORMATION

- Ecotoxicity (aquatic and terrestrial, where available):** This product could be toxic to fish due to its high alkalinity.
- Persistence and degradability:** Unknown
- Bioaccumulative potential:** Limestone is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
- Mobility in soil:** Unknown
- Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

STATE REGULATIONS: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

CANADA WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).
Crystalline silica: WHMIS Classification D2A.

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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National Gypsum Company is the exclusive service provider for products manufactured by ProForm Finishing Products, LLC.

ProForm[®]
Finishing Products

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
proformfinishing.com



SAFETY DATA SHEET

1. Identification

Product identifier SHEETROCK® Brand Ceiling Spray Texture

Other means of identification

SDS number 48000020001

Additional Products QT Poly – Fine, Medium, and Coarse grades

Synonyms Spray texture

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A
Specific target organ toxicity, repeated exposure (inhalation) Category 2 (Lung)

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure by inhalation.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 85
Kaolin	1332-58-7	< 15
Attapulgite	12174-11-7	< 5
Diatomaceous earth	68855-54-9	< 5

Perlite	93763-70-3	< 5
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Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 3.5

Composition comments

All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is <3.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling

Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Limestone (CAS 1317-65-3)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Diatomaceous earth (CAS 68855-54-9)	TWA	0.8 mg/m ³	
		20 mppcf	
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m ³	Total dust.
		0.1 mg/m ³	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	2 mg/m ³	Respirable fraction.
		Impurities	Type
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Diatomaceous earth (CAS 68855-54-9)	TWA	6 mg/m ³	
		Kaolin (CAS 1332-58-7)	TWA
10 mg/m ³	Total		
Limestone (CAS 1317-65-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear approved safety goggles.

Skin protection

Hand protection

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards

None.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Powder.
Color	Gray to off-white.
Odor	Slight acrylic.
Odor threshold	Not applicable.
pH	7 - 8.5
Melting point/freezing point	Not applicable. / 32 °F (0 °C)
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2 - 3 (H ₂ O=1)
Solubility(ies)	
Solubility (water)	Soluble in water.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	25 - 56.2 lb/ft ³
VOC (Weight %)	0 g/l

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
Hazardous decomposition products	Above 1472°F (800°C) limestone (CaCO ₃) can decompose to lime (CaO) and release carbon dioxide (CO ₂).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Ingestion	Ingestion may cause irritation and stomach discomfort.

Symptoms related to the physical, chemical and toxicological characteristics Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity Not expected to be a hazard under normal conditions of intended use.

Skin corrosion/irritation Not a skin irritant.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Not a skin sensitizer.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgit (CAS -)	3 Not classifiable as to carcinogenicity to humans.
Attapulgit (CAS 12174-11-7)	2B Possibly carcinogenic to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Diatomaceous earth (CAS 68855-54-9)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure No data available, but none expected.

Specific target organ toxicity - repeated exposure May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability Not applicable.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)
Diatomaceous earth (CAS 68855-54-9)
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)
Perlite (CAS 93763-70-3)

US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)
Perlite (CAS 93763-70-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)
Diatomaceous earth (CAS 68855-54-9)
Kaolin (CAS 1332-58-7)
Limestone (CAS 1317-65-3)
Perlite (CAS 93763-70-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)
Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-November-2014

Revision date 11-February-2015

Version # 02

Further information Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

HMIS® ratings

Health: 1*

Flammability: 0

Physical hazard: 0

NFPA ratings



List of abbreviations

NFPA: National Fire Protection Association.

References

Registry of Toxic Effects of Chemical Substances (RTECS)

HSDB® - Hazardous Substances Data Bank

Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

ACOUSTICAL CEILINGS

- 1. UNITED STATES GYPSUM (USG) - CEILINGS GRID AND TILE**
- 2. ARMSTRONG - CEILINGS GRID AND TILE**
- 3. CERTAINTEED - CEILING TILE**
- 4. ROCKFON/CHICAGO METALLIC - CEILING GRID**



SAFETY DATA SHEET

1. Identification

Product identifier DONN® DX®/DXL™ Acoustical Suspension System

Other means of identification

SDS number 42000001001

Additional Products: DONN® DX®/DXL™ Concealed Acoustical Suspension System, DONN® DXW™ Acoustical Suspension System, DONN® Centricitee™ DXT™/DXLT™ Acoustical Suspension System, DONN® Centricitee™ TRDXT™ Transparencies Textured "Mortar-lock" Acoustical Suspension System, DONN® Finline® 1/8 DXFF™ Acoustical Suspension System, DONN® Finline® DXF™/DXLF™ Acoustical Suspension System, DONN® Identitee® DXI™ Acoustical Suspension System, DONN® SDX™/SDXL™ Acoustical Suspension System, DONN® Acoustical Suspension System Wall Moldings

Synonyms Ceiling Tile Grid

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name USG Interiors, LLC

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

Supplemental information

Steel products as sold do not present an inhalation, ingestion, or skin hazard. However, individual customer processes, (such as welding, sawing, brazing, grinding, abrasive blasting, and machining) may result in the formation of fumes, dust (combustible or otherwise), and/or particulate that may present a variety of health hazards. Molten steel is also hazardous.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Steel	65997-19-5	> 95

Composition comments This product is composed of hot-dipped galvanized steel. The following list identifies those elements which may exist in steel or which may comprise compounds present in steel or alloy steels. Aluminum, beryllium, boron, calcium, carbon, cerium, chromium, cobalt, copper, hafnium, iron, lanthanum, lead, magnesium, manganese, molybdenum, nickel, niobium, nitrogen, oxygen, phosphorus, selenium, silicon, sulfur, tantalum, tin, titanium, tungsten, vanadium, yttrium, zinc, zirconium.

4. First-aid measures

Inhalation	Due to the physical nature of this product, inhalation is unlikely. There are no known health effects due to inhalation.
Skin contact	Edges and notches (where present) may be sharp and can cut skin. Cuts or abrasions should be treated promptly with thorough cleansing of the affected area. Seek medical attention for severe cuts or abrasions.
Eye contact	Sharp edges and notches (where present) may cause cuts and irritation. If eye is cut or otherwise damaged, seek medical attention.
Ingestion	Due to the physical nature of this product, ingestion is unlikely. There are no known health effects due to ingestion.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	None.

7. Handling and storage

Precautions for safe handling	Edges and notches (where present) may be sharp and can cut skin. Unload from package with caution and handle carefully. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Falling pieces can pose an injury hazard. Do not store open boxes or individual pieces above chest level. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Ventilation is not normally required.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	Not necessary under normal conditions.
Thermal hazards	None.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practices.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Metal tees.

Color Various.

Odor Low to no odor.

Odor threshold Not applicable.

pH Not applicable.

Melting point/freezing point 2400 - 2800 °F (1315.56 - 1537.78 °C) (base metal (steel))

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density 7 - 8 (H₂O = 1)

Solubility(ies) Not soluble in water.

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not applicable.

Viscosity Not applicable.

Other information

Bulk density 480 - 500 lb/ft³

VOC (Weight %) 0 %

10. Stability and reactivity

Reactivity The product is stable and non reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion Not likely, due to the form of the product.

Inhalation Not likely, due to the form of the product.

Skin contact Edges and notches (where present) may be sharp and can cut skin. Under normal conditions of intended use, this product does not pose a skin hazard.

Eye contact Contact with sharp edges and notches (where present) may cut the eye and cause eye damage.

Symptoms related to the physical, chemical and toxicological characteristics Sharp edges and notches (where present) may cause cuts and irritation.

Information on toxicological effects

Acute toxicity	None.
Skin corrosion/irritation	Edges and notches (where present) may be sharp and can cut skin.
Serious eye damage/eye irritation	Contact with sharp edges and notches (where present) may cut the eye and cause eye damage.
Respiratory sensitization	No data available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	Not expected to be mutagenic.
Carcinogenicity	Not expected.
Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	No data available, but none expected.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Further information	No other specific acute or chronic health impact noted.

12. Ecological information

Ecotoxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	The metals contained in this product are recyclable. Dispose in accordance with applicable federal, state, and local regulations.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No
 SARA 311/312 Hazardous chemical No
 SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
 Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
 Not regulated.
Safe Drinking Water Act (SDWA) Not regulated.
Food and Drug Administration (FDA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List
 Not regulated.
US. New Jersey Worker and Community Right-to-Know Act
 Not regulated.
US. Pennsylvania RTK - Hazardous Substances
 Not regulated.
US. Rhode Island RTK
 Not regulated.
US. California Proposition 65
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
 Not listed.

International Inventories

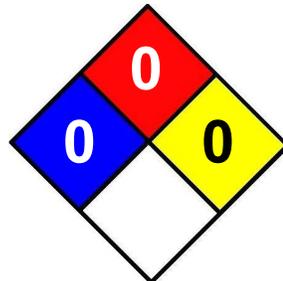
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 27-December-2013
Revision date 21-March-2023
Version # 04
Further information NFPA Ratings:
 Health: 0
 Flammability: 0
 Physical hazard: 0
 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings



List of abbreviations

NFPA: National Fire Protection Association.

Disclaimer

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SAFETY DATA SHEET

1. Identification

Product identifier USG® Radar™ Basic Acoustical Ceiling Panels

Other means of identification

SDS number 41999270001

Additional Products Radar™, Radar™ High Durability, Radar™ Illusion, Adobe™, Fifth Avenue™, Fissured™ Basic, Majestic, Olympia™ Micro™, Moonscape™, Plateau™, Sierra™, Stonehurst™ Acoustical Ceiling Panels, USG Ceilings® Kitchen Lay In Panel

Synonyms Ceiling Tiles, Water Felted Mineral Fiber Ceiling Panels/Tiles

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name USG Interiors, LLC

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A
Specific target organ toxicity, repeated exposure Category 2 (Lung)

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Perlite	93763-70-3	> 55

Slag wool fiber	N/A	< 55
Cellulose	9004-34-6	< 20
Limestone	1317-65-3	< 20
Starch	9005-25-8	< 10
Kaolin, calcined	92704-41-1	< 5
Titanium dioxide	13463-67-7	< 5
Calcium carbonate, synthetic	471-34-1	< 2
Kaolinite	1318-74-7	< 2
Silicic acid, sodium salt	1344-09-8	< 2

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 4

Composition comments

All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 4%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

Raw materials and/or coatings in this product contain small amounts of titanium dioxide, which has been classified as possibly carcinogenic to humans by the International Agency for Research on Cancer (IARC). However, per IARC "no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints" (1). See Section 16 for further information.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Avoid inhalation of dust and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

Environmental precautions Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA Components	Type	Value	Form
Slag wool fiber	TWA	5 mg/m ³	Fiber, respirable (diameter ≤ 3.5 μm and length ≥ 10 μm)
		15 mg/m ³	Fiber, total
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)			
Impurities	Type	Value	
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m ³	
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Limestone (CAS 1317-65-3)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Starch (CAS 9005-25-8)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m ³	Total dust.
US. OSHA Table Z-3 (29 CFR 1910.1000)			
Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	
Kaolinite (CAS 1318-74-7)	TWA	1 mg/m3	Respirable fraction.
Slag wool fiber	TWA	1 fibers/cm3	Fiber, respirable (length > 5 µm and aspect ratio ≥ 3:1)
Starch (CAS 9005-25-8)	TWA	10 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium carbonate, synthetic (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Slag wool fiber	TWA	3 fibers/cm3	Fibrous dust.
		3 fibers/cm3	Fiber, respirable (diameter ≤ 3.5 µm and length ≥ 10 µm)
		5 mg/m3	Fiber, total
Starch (CAS 9005-25-8)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure. Cut and trim with a utility knife or hand saw to minimize dust levels. If a router is used it must have a dust collection system. Operations such as power cutting, power kerfing or using compressed air to remove dust are not recommended (2). See Section 16 for further information.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear approved safety goggles.

Skin protection**Hand protection**

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection**Other**

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state Solid.
Form Panel.
Color White or colored surface; beige/gray core.

Odor Low to no odor.

Odor threshold Not applicable.

pH 9

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density 0.2 - 0.22 (H₂O=1)

Solubility(ies)

Solubility (water) Very low solubility in water.

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature 2000 °F (1093.3 °C) (Perlite)

Viscosity Not applicable.

Other information

Bulk density 12 - 14 lb/ft³

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

VOC 0 %

10. Stability and reactivity

Reactivity The product is stable and non reactive under normal conditions of storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	May cause irritation through mechanical abrasion.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Ingestion may cause irritation and stomach discomfort.

Symptoms related to the physical, chemical and toxicological characteristics Dust may irritate throat and respiratory system and cause coughing.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Titanium dioxide (CAS 13463-67-7)		
Acute		
Inhalation		
LC50	Rat	3.43 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation May cause irritation through mechanical abrasion.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	No data available, but none expected.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available, but none expected.

Carcinogenicity Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.
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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer
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Reproductive toxicity No data available, but none expected.

Specific target organ toxicity - single exposure No data available, but none expected.

Specific target organ toxicity - repeated exposure May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Titanium dioxide (CAS 13463-67-7)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna > 100 mg/l, 48 Hours
Fish	LL50	Oryzias latipes > 100 mg/l, 96 Hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Bioaccumulation is not expected.

Mobility in soil

No data available.

Other adverse effects

None expected.

13. Disposal considerations

Disposal instructions

Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations

Dispose of in accordance with local regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations.

Contaminated packaging

Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects
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Toxic Substances Control Act (TSCA)

All components of the mixture on the TSCA 8(b) inventory are designated "active".

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

- Cellulose (CAS 9004-34-6)
- Crystalline silica (Quartz) (CAS 14808-60-7)
- Limestone (CAS 1317-65-3)
- Perlite (CAS 93763-70-3)
- Starch (CAS 9005-25-8)
- Titanium dioxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act

- Cellulose (CAS 9004-34-6)
- Crystalline silica (Quartz) (CAS 14808-60-7)
- Limestone (CAS 1317-65-3)
- Perlite (CAS 93763-70-3)
- Titanium dioxide (CAS 13463-67-7)

US. Pennsylvania Worker and Community Right-to-Know Law

- Cellulose (CAS 9004-34-6)
- Crystalline silica (Quartz) (CAS 14808-60-7)
- Limestone (CAS 1317-65-3)
- Perlite (CAS 93763-70-3)
- Starch (CAS 9005-25-8)
- Titanium dioxide (CAS 13463-67-7)

US. Rhode Island RTK

- Cellulose (CAS 9004-34-6)
- Crystalline silica (Quartz) (CAS 14808-60-7)
- Limestone (CAS 1317-65-3)
- Slag wool fiber (CAS N/A)
- Starch (CAS 9005-25-8)
- Titanium dioxide (CAS 13463-67-7)

California Proposition 65



WARNING: This product can expose you to chemicals including Titanium dioxide, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

- Acetaldehyde (CAS 75-07-0) Listed: April 1, 1988
- Crystalline silica (Quartz) (CAS 14808-60-7) Listed: October 1, 1988
- Formaldehyde (CAS 50-00-0) Listed: January 1, 1988
- Titanium dioxide (CAS 13463-67-7) Listed: September 2, 2011

California Proposition 65 - CRT: Listed date/Developmental toxin

- Methanol (CAS 67-56-1) Listed: March 16, 2012

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

- Crystalline silica (Quartz) (CAS 14808-60-7)
- Titanium dioxide (CAS 13463-67-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 19-December-2014

Revision date 08-May-2019

Version # 05

Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Industrial hygiene testing by RJ Lee Group showed that cutting with a utility knife or a router equipped with a dust collection system did not produce airborne respirable crystalline in exceedance of OSHA PELs. However, cutting with a power saw, even with a dust collection system in place, did produce some exceedances. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Slag Wool Fiber: Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted. These studies have found no significant association of non-malignant (i.e. fibrosis) or malignant (i.e., lung cancer or mesothelioma) lung disease and exposures to slag wool fibers and have not established a causal relationship between exposure and non-malignant or malignant diseases.

In 2001, the International Agency for Research on Cancer (IARC) assigned slag wool fiber to the Group 3 category ["not classifiable as to carcinogenicity to humans"].

The synthetic mineral fiber used in this product is exonerated from classification as a carcinogen in accordance with Note Q in the EU Commission Directive 97/69/EC.

Titanium dioxide: Raw materials and/or coatings in this product contain small amounts of titanium dioxide. The International Agency for Research on Cancer (IARC) has determined that titanium dioxide is possibly carcinogenic to humans (Group 2B) based on inadequate evidence in humans and sufficient evidence in experimental animals. This conclusion relates to long-term inhalation exposure to high concentrations of pigmentary (powdered) or ultrafine titanium dioxide. However, no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints. The available human studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer.

The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4).

The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens.

NFPA Ratings:

Health: 1

Flammability: 0

Physical hazard: 0

NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings



References

1.) International Agency for Research on Cancer (IARC). Volume 93: Carbon Black, Titanium Dioxide, and Talc; (5. Summary of data reported). IARC, 2010. Available at:

<<http://monographs.iarc.fr/ENG/Monographs/vol93/mono93.pdf>>

2.) North American Insulation Manufacturer's Association (NAIMA). Working Smart with Fiber Glass, Rock Wool and Slag Wool Products. NAIMA, 2007. Available at:

<<http://insulationinstitute.org/wp-content/uploads/2016/02/N059.pdf>>

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



SAFETY DATA SHEET

1. Identification

Product identifier	Eclipse™ Acoustical Ceiling Panels
Other means of identification	
SDS number	41263320001
Additional Products	Eclipse™ High NRC, Eclipse™ HRC, Eclipse™ Illusion, Eclipse™ Pedestals™, Luna™, Luna™ Pedestals™, Mars™ (including Planks and Logix), Mars™ Cleanroom, Mars™ HRC (including Planks), Mars™ High-CAC, Mars™ High-NRC, Mars™ Healthcare, Mars™ Healthcare High-NRC, Mars™ Healthcare High-CAC, Millennia™, Millennia™ High-NRC, Millennia™ Illusion and Mars™ Healthcare Clean Room
Synonyms	Ceiling Tiles, Mineral Fiber Ceiling Panels/Tiles
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer/Importer/Supplier/Distributor information	
Company name	USG Interiors, LLC
Address	550 West Adams Street Chicago, Illinois 60661-3637
Telephone	1-800-874-4968
Website	www.usg.com
Emergency phone number	1-800-507-8899

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Slag wool fiber	N/A	> 75
Kaolin	1332-58-7	< 10
Perlite	93763-70-3	< 10
Starch	9005-25-8	< 6
Aluminum hydroxide	21645-51-2	< 2

Continuous filament glass fiber	65997-17-3	< 2
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1)	26499-65-0	< 2
Titanium dioxide	13463-67-7	< 1

Composition comments All concentrations are in percent by weight.

Raw materials and/or coatings in this product contain small amounts of titanium dioxide, which has been classified as possibly carcinogenic to humans by the International Agency for Research on Cancer (IARC). However, per IARC "no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints" (1). See Section 16 for further information.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media Not applicable.

Specific hazards arising from the chemical Not a fire hazard.

Special protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

Environmental precautions Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA Components

Components	Type	Value	Form
Slag wool fiber	TWA	5 mg/m ³	Fiber, respirable (diameter ≤ 3.5 µm and length ≥ 10 µm)
		15 mg/m ³	Fiber, total

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Starch (CAS 9005-25-8)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m ³	Total dust.
		15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminum hydroxide (CAS 21645-51-2)	TWA	1 mg/m ³	Respirable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm ³	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
Kaolin (CAS 1332-58-7)	TWA	2 mg/m ³	Respirable fraction.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m ³	Inhalable fraction.
Slag wool fiber	TWA	1 fibers/cm ³	Fiber, respirable (length > 5 µm and aspect ratio ≥ 3:1)
Starch (CAS 9005-25-8)	TWA	10 mg/m ³	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm ³	Respirable fibers ($\leq 3.5 \mu\text{m}$ in diameter & $\geq 10 \mu\text{m}$ in length)
		3 fibers/cm ³	Fibrous dust.
		5 mg/m ³	Fiber, total
Kaolin (CAS 1332-58-7)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Slag wool fiber	TWA	3 fibers/cm ³	Fibrous dust.
		3 fibers/cm ³	Fiber, respirable (diameter $\leq 3.5 \mu\text{m}$ and length $\geq 10 \mu\text{m}$)
		5 mg/m ³	Fiber, total
Starch (CAS 9005-25-8)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure. Cut and trim with a utility knife or hand saw to minimize dust levels. If a router is used it must have a dust collection system. Operations such as power cutting, power kerfing or using compressed air to remove dust are not recommended (2). See Section 16 for further information.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear approved safety goggles.

Skin protection**Hand protection**

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection**Other**

Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards

None.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Panel or tile.

Color	White or colored surface; beige/gray core.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	9
Melting point/freezing point	2200 °F (1204.44 °C) (Slag wool)
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	0.24 - 0.35 (H ₂ O=1)
Solubility(ies)	
Solubility (water)	Very low solubility in water.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	15 - 22 lb/ft ³
VOC	0 % (see Section 16 for further detail)

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	May cause irritation through mechanical abrasion.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Ingestion	Ingestion may cause irritation and stomach discomfort.

Symptoms related to the physical, chemical and toxicological characteristics Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.

Information on toxicological effects

Acute toxicity Not expected to be a hazard under normal conditions of intended use.

Components	Species	Test Results
Aluminum hydroxide (CAS 21645-51-2)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Kaolin (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Inhalation		
LC50	Rat	> 2 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Starch (CAS 9005-25-8)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	> 50000 mg/kg
Titanium dioxide (CAS 13463-67-7)		
Acute		
Inhalation		
LC50	Rat	3.43 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not expected to cause respiratory sensitization based on non-skin sensitization history.	
Skin sensitization	Not a skin sensitizer.	
Germ cell mutagenicity	No data available, but none expected.	
Carcinogenicity	Due to the form of the product, exposure to the potentially carcinogenic components is not expected.	
<p>Continuous filament glass fibers: The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material. The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen. As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.</p>		
IARC Monographs. Overall Evaluation of Carcinogenicity		
Continuous filament glass fiber (CAS 65997-17-3)	3 Not classifiable as to carcinogenicity to humans.	
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.	
NTP Report on Carcinogens		
Continuous filament glass fiber (CAS 65997-17-3)	Reasonably Anticipated to be a Human Carcinogen.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not regulated.		

Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	No data available, but none expected.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	No other specific acute or chronic health impact noted.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Kaolin (CAS 1332-58-7)		
Aquatic		
<i>Acute</i>		
Crustacea	LC50	Daphnia magna > 1.1 g/l, 48 Hours
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours
Titanium dioxide (CAS 13463-67-7)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna > 100 mg/l, 48 Hours
Fish	LL50	Oryzias latipes > 100 mg/l, 96 Hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Kaolin (CAS 1332-58-7)

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Starch (CAS 9005-25-8)

Titanium dioxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act

Kaolin (CAS 1332-58-7)

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Titanium dioxide (CAS 13463-67-7)

US. Pennsylvania Worker and Community Right-to-Know Law

Kaolin (CAS 1332-58-7)

Perlite (CAS 93763-70-3)

Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

Starch (CAS 9005-25-8)

Titanium dioxide (CAS 13463-67-7)

US. Rhode Island RTK

Continuous filament glass fiber (CAS 65997-17-3)

Kaolin (CAS 1332-58-7)

Slag wool fiber (CAS N/A)

Starch (CAS 9005-25-8)

Titanium dioxide (CAS 13463-67-7)

California Proposition 65



WARNING: This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Titanium dioxide (CAS 13463-67-7)

Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Continuous filament glass fiber (CAS 65997-17-3)

Titanium dioxide (CAS 13463-67-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	19-December-2014
Revision date	19-July-2023
Version #	05
Further information	<p>Slag Wool Fiber: Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted. These studies have found no significant association of non-malignant (i.e. fibrosis) or malignant (i.e., lung cancer or mesothelioma) lung disease and exposures to slag wool fibers and have not established a causal relationship between exposure and non-malignant or malignant diseases. In 2001, the International Agency for Research on Cancer (IARC) assigned slag wool fiber to the Group 3 category ["not classifiable as to carcinogenicity to humans"]. The synthetic mineral fiber used in this product is exonerated from classification as a carcinogen in accordance with Note Q in the EU Commission Directive 97/69/EC.</p> <p>Titanium dioxide: Raw materials and/or coatings in this product contain small amounts of titanium dioxide. The International Agency for Research on Cancer (IARC) has determined that titanium dioxide is possibly carcinogenic to humans (Group 2B) based on inadequate evidence in humans and sufficient evidence in experimental animals. This conclusion relates to long-term inhalation exposure to high concentrations of pigmentary (powdered) or ultrafine titanium dioxide. However, no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints. The available human studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer. The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4). The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens.</p> <p>VOC Emissions: USG certifies the above listed products are Low-Emitting, defined as a concentration for each individual volatile organic compound specified in the Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers (CA/DHS/EHLB/R-174, 2004; aka, chamber testing portion of CA Section 01350) and ASTM Standard Guide D5116-06.</p> <p>NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 NFPA Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe</p>
NFPA ratings	
References	<p>1.) International Agency for Research on Cancer (IARC). Volume 93: Carbon Black, Titanium Dioxide, and Talc; (5. Summary of data reported). IARC, 2010. Available at: <http://monographs.iarc.fr/ENG/Monographs/vol93/mono93.pdf></p> <p>2.) North American Insulation Manufacturer's Association (NAIMA). Working Smart with Fiber Glass, Rock Wool and Slag Wool Products. NAIMA, 2007. Available at: <http://insulationinstitute.org/wp-content/uploads/2016/02/N059.pdf></p>
Disclaimer	<p>This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.</p>

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 17-Mar-2020

Revision Date 17-Mar-2020

Revision Number 1

1. Identification

Product identifier

Product Name Suspended Ceiling Grid Systems

Other means of identification

Product Code(s) Prelude, Suprafine, Silhouette, Interlude, CleanRoom, Single Span, Continuous Load Path, Drywall Grid Systems, QuikStix, ShortSpan, Molding, Transition Molding, Angle Molding

Synonyms Ceiling Grid Suspension System, Main Beams, Main Runners, Cross Tees, Cross Runners, Molding/Trim

Recommended use of the chemical and restrictions on use

Recommended use Ceilings

Restrictions on use No information available.

Details of the supplier of the safety data sheet

Initial supplier identifier

Armstrong World Industries
255 Montpellier Blvd
St. Laurent, Quebec
Canada H4N 2G3
Tel: 877-276-7876
techline@armstrongceilings.com

E-mail techline@armstrongceilings.com

Emergency telephone number

Emergency Telephone 1-800-255-3924 (ChemTel)

2. Hazard(s) identification

Classification

This product is an article as defined by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200) and Canada WHMIS 2015, which includes the amended Hazardous Products Act (HPA). No exposure to hazardous chemicals is expected to occur during intended product use. Misuse of the product may result in exposure to hazards.

Skin sensitization	Category 1
Carcinogenicity	Category 2

Label elements

Warning

Hazard statements

May cause an allergic skin reaction.
Suspected of causing cancer.



Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label).

Skin

IF ON SKIN: Wash with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other information

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms

Ceiling Grid Suspension System, Main Beams, Main Runners, Cross Tees, Cross Runners, Molding/Trim

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Aluminum	7429-90-5	<=5	-	-
Zinc (metallic)	7440-66-6	3-8	-	-
Titanium dioxide	13463-67-7	0-1	-	-
Barium sulfate	7727-43-7	0-1	-	-
Petroleum naphtha, light aromatic	64742-95-6	0-<1	-	-
Naphtha (petroleum), heavy aromatic	64742-94-5	0-<1	-	-
Bisphenol A - Epichlorohydrin polymer	25068-38-6	0-<1	-	-
n-Butyl alcohol	71-36-3	0-<1	-	-
Naphthalene	91-20-3	0-<1	-	-
Isobutyl alcohol	78-83-1	0-<1	-	-
Ethylbenzene	100-41-4	0-<1	-	-
Carbon black	1333-86-4	0-<1	*	-

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
Inhalation	Remove to fresh air. IF INHALED: Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur. IF IN EYES: Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Not an expected route of exposure.

Most important symptoms and effects, both acute and delayed

Symptoms	Itching. Rashes. Hives.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None known based on information supplied.
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
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Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Aluminum 7429-90-5	TWA: 1 mg/m ³ respirable particulate matter	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale
Barium sulfate 7727-43-7	TWA: 5 mg/m ³ inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
n-Butyl alcohol 71-36-3	TWA: 20 ppm	TWA: 100 ppm TWA: 300 mg/m ³ (vacated) S* (vacated) Ceiling: 50 ppm (vacated) Ceiling: 150 mg/m ³	IDLH: 1400 ppm Ceiling: 50 ppm Ceiling: 150 mg/m ³
Naphthalene 91-20-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³
Isobutyl alcohol	TWA: 50 ppm	TWA: 100 ppm	IDLH: 1600 ppm

78-83-1		TWA: 300 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 150 mg/m ³	TWA: 50 ppm TWA: 150 mg/m ³	
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m ³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m ³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³	
Carbon black 1333-86-4	TWA: 3 mg/m ³ inhalable particulate matter	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH	
Chemical name	Alberta	British Columbia	Ontario	Quebec
Aluminum 7429-90-5	TWA: 10 mg/m ³	TWA: 1.0 mg/m ³	TWA: 1 mg/m ³	TWA: 10 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³
Barium sulfate 7727-43-7	TWA: 10 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³
n-Butyl alcohol 71-36-3	TWA: 20 ppm TWA: 60 mg/m ³	TWA: 15 ppm Ceiling: 30 ppm	TWA: 20 ppm	Ceiling: 50 ppm Ceiling: 152 mg/m ³ Skin
Naphthalene 91-20-3	TWA: 10 ppm TWA: 52 mg/m ³ STEL: 15 ppm STEL: 79 mg/m ³ Skin	TWA: 10 ppm Skin	TWA: 10 ppm Skin	TWA: 10 ppm TWA: 52 mg/m ³ STEL: 15 ppm STEL: 79 mg/m ³
Isobutyl alcohol 78-83-1	TWA: 50 ppm TWA: 152 mg/m ³	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm TWA: 152 mg/m ³
Ethylbenzene 100-41-4	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 125 ppm STEL: 543 mg/m ³	TWA: 20 ppm	TWA: 20 ppm	TWA: 100 ppm TWA: 434 mg/m ³ STEL: 125 ppm STEL: 543 mg/m ³
Carbon black 1333-86-4	TWA: 3.5 mg/m ³	TWA: 3 mg/m ³	TWA: 3 mg/m ³	TWA: 3.5 mg/m ³
Chemical name	ACGIH			
Naphthalene	(-end of shift 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis)			
Ethylbenzene	0.15 g/g creatinine (urine -end of shift Sum of mandelic acid and phenylglyoxylic acid)			

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Silver gray metallic, Solid
Physical state Solid
Color Silver gray
Odor None
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	1530 °C / 2786 °F	
Boiling point / boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	7.86	
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties No information available.
Oxidizing properties No information available.
Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Liquid Density No information available
Bulk density No information available

10. Stability and reactivity

Reactivity None under normal use conditions.
Chemical stability Stable under normal conditions.
Possibility of hazardous reactions None under normal processing.
Conditions to avoid None known based on information supplied.
Incompatible materials None known based on information supplied.
Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information	Exposure is not expected for product under normal conditions of use.
Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Itching. Rashes. Hives.
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Acute toxicity

Numerical measures of toxicity

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 10000 mg/kg (Rat)	-	-
Barium sulfate	= 307000 mg/kg (Rat)	-	-
Petroleum naphtha, light aromatic	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Naphtha (petroleum), heavy aromatic	> 5000 mg/kg (Rat)	> 2 mL/kg (Rabbit)	> 590 mg/m ³ (Rat) 4 h
Bisphenol A - Epichlorohydrin polymer	= 11400 mg/kg (Rat)	-	-
n-Butyl alcohol	= 700 mg/kg (Rat)	= 3402 mg/kg (Rabbit)	> 8000 ppm (Rat) 4 h
Naphthalene	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h
Isobutyl alcohol	= 2460 mg/kg (Rat)	= 3400 mg/kg (Rabbit)	> 6.5 mg/L (Rat) 4 h
Ethylbenzene	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
Carbon black	> 15400 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	Classification based on data available for ingredients. May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on individual ingredients of the mixture. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Naphthalene 91-20-3	A3	Group 2B	Reasonably Anticipated	X
Ethylbenzene 100-41-4	A3	Group 2B	-	X
Carbon black 1333-86-4	A3	Group 2B	-	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum naphtha, light aromatic 64742-95-6	-	LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	-	EC50: =6.14mg/L (48h, Daphnia magna)
Naphtha (petroleum), heavy aromatic 64742-94-5	-	LC50: =45mg/L (96h, Pimephales promelas) LC50: =41mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =19mg/L (96h, Pimephales promelas) LC50: =1740mg/L (96h, Lepomis macrochirus)	-	EC50: =0.95mg/L (48h, Daphnia magna)
n-Butyl alcohol 71-36-3	EC50: >500mg/L (96h, Desmodesmus subspicatus) EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: 100000 - 500000µg/L (96h, Lepomis macrochirus) LC50: 1730 - 1910mg/L (96h, Pimephales promelas) LC50: =1910000µg/L (96h, Pimephales promelas) LC50: =1740mg/L (96h,	-	EC50: 1897 - 2072mg/L (48h, Daphnia magna) EC50: =1983mg/L (48h, Daphnia magna)

Naphthalene 91-20-3	-	Pimephales promelas) LC50: =31.0265mg/L (96h, Lepomis macrochirus) LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss) LC50: 5.74 - 6.44mg/L (96h, Pimephales promelas) LC50: =1.99mg/L (96h, Pimephales promelas) LC50: =1.6mg/L (96h, Oncorhynchus mykiss)	-	EC50: 1.09 - 3.4mg/L (48h, Daphnia magna) EC50: =1.96mg/L (48h, Daphnia magna) LC50: =2.16mg/L (48h, Daphnia magna)
Isobutyl alcohol 78-83-1	-	LC50: 1480 - 1730mg/L (96h, Lepomis macrochirus) LC50: 1370 - 1670mg/L (96h, Pimephales promelas) LC50: =375mg/L (96h, Pimephales promelas) LC50: 1120 - 1520mg/L (96h, Oncorhynchus mykiss)	-	EC50: 1070 - 1933mg/L (48h, Daphnia magna) EC50: =1300mg/L (48h, Daphnia magna)
Ethylbenzene 100-41-4	EC50: =4.6mg/L (72h, Pseudokirchneriella subcapitata) EC50: 1.7 - 7.6mg/L (96h, Pseudokirchneriella subcapitata) EC50: >438mg/L (96h, Pseudokirchneriella subcapitata) EC50: 2.6 - 11.3mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 7.55 - 11mg/L (96h, Pimephales promelas) LC50: =32mg/L (96h, Lepomis macrochirus) LC50: 11.0 - 18.0mg/L (96h, Oncorhynchus mykiss) LC50: =4.2mg/L (96h, Oncorhynchus mykiss) LC50: =9.6mg/L (96h, Poecilia reticulata) LC50: 9.1 - 15.6mg/L (96h, Pimephales promelas)	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50: 1.8 - 2.4mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Naphtha (petroleum), heavy aromatic 64742-94-5	2.9 - 6.1
n-Butyl alcohol 71-36-3	0.785
Naphthalene 91-20-3	3.6
Isobutyl alcohol 78-83-1	0.79
Ethylbenzene 100-41-4	3.2

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

RCRA (Resource Conservation and Recovery Act) waste information

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
n-Butyl alcohol 71-36-3	-	Included in waste stream: F039	-	U031
Naphthalene 91-20-3	U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145	-	U165
Isobutyl alcohol 78-83-1	U140	Included in waste streams: F005, F039	-	U140
Ethylbenzene 100-41-4	-	Included in waste stream: F039	-	-

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Naphthalene 91-20-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	-

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Aluminum 7429-90-5	Ignitable powder
n-Butyl alcohol 71-36-3	Toxic
Naphthalene 91-20-3	Toxic
Ethylbenzene 100-41-4	Toxic Ignitable

14. Transport information

DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories**TSCA**

Contact supplier for inventory compliance status.

Chemical name	CAS No	US TSCA Inventory listing	US TSCA active/inactive designation
Zinc (metallic)	7440-66-6		
Barium sulfate	7727-43-7	Present	Active
Titanium dioxide	13463-67-7	Present	Active
Polyester	-		
Naphtha (petroleum), heavy aromatic	64742-94-5	Present	Active
Petroleum naphtha, light aromatic	64742-95-6	Present	Active
Bisphenol A - Epichlorohydrin polymer	25068-38-6	Present	Active
Xylene	1330-20-7	Present	Active
2-Butoxyethanol	111-76-2	Present	Active
Diethylene glycol monobutyl ether	112-34-5	Present	Active
Rutile, antimony chromium buff	68186-90-3	Present	Active
1,2,4 Trimethylbenzene	95-63-6	Present	Active
Naphthalene	91-20-3	Present	Active
n-Butyl alcohol	71-36-3	Present	Active
Isobutyl alcohol	78-83-1	Present	Active
Methyl ethyl ketone	78-93-3	Present	Active
Iron oxide	1309-37-1	Present	Active
Acrylic polymer	-		
Proprietary inert	-		
Ethylbenzene	100-41-4	Present	Active
Carbon black	1333-86-4	Present	Active
C.I. Pigment Green 50	68186-85-6	Present	Active
Aluminum hydroxide	21645-51-2	Present	Active
C.I. Pigment Green 26	68187-49-5	Present	Active
Silicon dioxide	7631-86-9	Present	Active
Cumene	98-82-8	Present	Active
C.I. Pigment Yellow 53	8007-18-9	Present	Active
Epoxy resin	-		
Phosphorous trichloride, reaction products with 1,1'-biphenyl and 2,4-bis(1,1-dimethylethyl)phenol	119345-01-6	Present	Active
Octadecyl	2082-79-3	Present	Active

3-(3',5'-di-tert-butyl-4'-hydroxyphenyl) propionate			
Toluene	108-88-3	Present	Active
Formaldehyde	50-00-0	Present	Active

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL

Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Aluminum - 7429-90-5	1.0
Barium sulfate - 7727-43-7	1.0
n-Butyl alcohol - 71-36-3	1.0
Naphthalene - 91-20-3	0.1
Ethylbenzene - 100-41-4	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Naphthalene 91-20-3	100 lb	X	X	X
Ethylbenzene 100-41-4	1000 lb	X	X	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
n-Butyl alcohol 71-36-3	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Naphthalene 91-20-3	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ
Isobutyl alcohol 78-83-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethylbenzene 100-41-4	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen
Naphthalene - 91-20-3	Carcinogen
Ethylbenzene - 100-41-4	Carcinogen
Carbon black - 1333-86-4	Carcinogen
C.I. Pigment Green 50 - 68186-85-6	Carcinogen
Cumene - 98-82-8	Carcinogen
C.I. Pigment Yellow 53 - 8007-18-9	Carcinogen
Toluene - 108-88-3	Developmental
Formaldehyde - 50-00-0	Carcinogen

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Aluminum 7429-90-5	X	X	X
Titanium dioxide 13463-67-7	X	X	X
Barium sulfate 7727-43-7	X	X	X
n-Butyl alcohol 71-36-3	X	X	X
Naphthalene 91-20-3	X	X	X
Isobutyl alcohol 78-83-1	X	X	X
Ethylbenzene 100-41-4	X	X	X
Carbon black 1333-86-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 2	Flammability 0	Instability 0	Physical and chemical properties -
HMIS	Health hazards 2*	Flammability 0	Physical hazards 0	Personal protection X
<i>Chronic Hazard Star Legend</i>		<i>* = Chronic Health Hazard</i>		

Key or legend to abbreviations and acronyms used in the safety data sheetLegend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Section 1. Identification

Product identifier

Product Identity Mineral Fiber Acoustical Ceiling Tile and Wall Panels (Class A) #1

Other means of identification Mineral Fiber Acoustical Ceiling Tile and Wall Panels (Class A) #1

Relevant identified uses of the substance or mixture and uses advised against

Acoustical ceiling tiles

Details of the supplier of the safety data sheet

Company Name Armstrong World Industries, Inc.
2500 Columbia Avenue, P.O. Box 3001
Lancaster, PA 17604

Emergency

24 hour Emergency Telephone No. (800) 255-3924 (ChemTel)

Customer Service: (877) 276-7876

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200 revised 2024 (GHS revision 7)).

Carcinogen, category 1A;H350

May cause cancer.

Label elements



Danger

H350 May cause cancer.

[Prevention]

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves, eye protection, and face protection.

[Response]

P308+313 IF exposed or concerned: Get medical advice or attention.

[Storage]

P405 Store locked up.

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Glass oxide, glass CAS Number: 65997-17-3 Synonyms: Borosilicate glass, Glass, oxide, chemicals	30 - 60	Not Classified	No data available
Perlite CAS Number: 130885-09-5 Synonyms: Perlite	30 - 60	Not Classified	No data available
Cellulose CAS Number: 9004-34-6 Synonyms: Cellulose	10 - 30	Not Classified	No data available
Kaolin CAS Number: 1332-58-7 Synonyms: Kaolin	7 - 13	Not Classified	No data available
Pregelatinized Starch CAS Number: 9005-25-8 Synonyms: Sago starch	7 - 13	Not Classified	No data available
Limestone CAS Number: 1317-65-3 Synonyms: Calcium carbonate	3 - 7	Not Classified	No data available
Aluminium hydroxide CAS Number: 21645-51-2 Synonyms: Aluminium hydroxide	1 - 5	Not Classified	No data available
Crystalline silica (Quartz) (respirable) CAS Number: 14808-60-7 Synonyms: Crystalline silica (Quartz) (respirable)	0.1 - 1	Carcinogen, category 1A;H350	No data available

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
Most important symptoms and effects, both acute and delayed	
Overview	No specific symptom data available. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. Treat symptomatically. See section 2 for further details.

Section 5. Fire-fighting measures

Extinguishing media

Carbon dioxide, regular dry chemical, regular foam, water spray.

Special hazards arising from the substance or mixture

Hazardous decomposition: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Combustible dust. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Keep away from sources of ignition - No smoking. Avoid inhalation of material or combustion by-products. Move material from fire area if it can be done without risk. Use extinguishing agents appropriate for surrounding fire. Dike for later disposal. Stay upwind and keep out of low areas.

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

ERG Guide No. ---

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Methods and material for containment and cleaning up

Keep out of water supplies, sewers and soil. In case of spillage, stop the flow of material and block any potential routes to water systems. Collect spilled material using mechanical equipment. Keep unnecessary people away,

isolate hazard area and deny entry. Avoid dust generation and accumulation. Keep container tightly closed. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Use non-sparking tools and equipment.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Do not handle until all safety precautions have been read and understood. Keep away from all ignition sources. Do not breathe dust. Use methods to minimize dust. Avoid contact with skin and eyes. Do not eat, drink, or smoke when using this product. Always wear recommended personal protective equipment. Wear personal protective clothing and equipment, see Section 8. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Take precautionary measures against static discharge. Dissipate static electricity during transfer by earthing (grounding and bonding) containers and equipment.

See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Store in a well-ventilated place. Avoid contact with molten material. Keep separated from incompatible substances. Keep container tightly closed. Empty containers may contain product residue. Do not reuse empty containers without commercial cleaning or reconditioning. Store and handle in accordance with all current regulations and standards.

Incompatible materials: No data available.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
1317-65-3	Limestone	OSHA	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (resp)
		ACGIH	TWA: 10 mg/m ³ Ceiling: 20 mg/m ³
		NIOSH	TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp)
1332-58-7	Kaolin	OSHA	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (resp)
		ACGIH	2 mg/m ³ (E, R) asbestos and crystalline silica < 1%, Respirable
		NIOSH	TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp)
9004-34-6	Cellulose	OSHA	TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp)
		ACGIH	10 mg/m ³
		NIOSH	TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp)
9005-25-8	Pregelatinized Starch	OSHA	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (resp)
		ACGIH	10 mg/m ³
		NIOSH	TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp)
14808-60-7	Crystalline silica (Quartz) (respirable)	OSHA	PEL 50 µg/m ³

		ACGIH	TWA: 0.025 mg/m ³
		NIOSH	0.05 mg/m ³ TWA (respirable)
21645-51-2	Aluminium hydroxide	OSHA	15 mg/m ³ (total dust), 5 mg/m ³ (respirable fraction) (as aluminum)
		ACGIH	TWA 1 mg/m ³ (respirable particulate matter) (Aluminum and its insoluble compounds)
		NIOSH	10 mg/m ³ (total dust), 5 mg/m ³ (respirable fraction) (as Aluminum)
65997-17-3	Glass oxide, glass	OSHA	15 mg/m ³ (as nuisance dust) 5 mg/m ³ (respirable fraction)
		ACGIH	10 mg/m ³ (as nuisance dust) 5 mg/m ³ (respirable fraction)
		NIOSH	No Established Limit
130885-09-5	Perlite	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.

Eyes

Protective safety glasses recommended

Skin

Protective gloves recommended.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State

Solid

Color

Various Colors

Odor

None

Melting point / freezing point

Not Available

Initial boiling point and boiling range

Not Available

Flammability (solid, gas)

Not Applicable

Upper/lower flammability or explosive limits

Lower Explosive Limit: Not Available

Upper Explosive Limit: Not Available

Flash Point

Not Available

Auto-ignition temperature

Not Available

Decomposition temperature

Not Available

pH

Not Available

Viscosity (cSt)

Not Available

Solubility in Water

Insoluble

Partition coefficient n-octanol/water (Log Kow)	Not Available
Vapor pressure (Pa)	Not Available
Relative Density	Not Available
Vapor Density	Not Available
Particle Characteristics	---
Evaporation rate (Ether = 1)	Not Available
VOC Content	Not Available

Other information

No other relevant information.

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials. Avoid generating dust. Avoid contact with molten material.

Incompatible materials

No data available.

Hazardous decomposition products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Glass oxide, glass - (65997-17-3)	No data available.	No data available.	No data available.	No data available.	No data available.
Perlite - (130885-09-5)	No data available.	No data available.	No data available.	No data available.	No data available.
Cellulose - (9004-34-6)	> 5,000.00, Rat - Category: NA	No data available.	No data available.	No data available.	No data available.
Kaolin - (1332-58-7)	No data available.	No data available.	No data available.	No data available.	No data available.
Pregelatinized Starch - (9005-25-8)	No data available.	No data available.	No data available.	No data available.	No data available.

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Limestone - (1317-65-3)	No data available.	No data available.	No data available.	No data available.	No data available.
Aluminium hydroxide - (21645-51-2)	> 10,000, Rat - Category: NA	No data available.	No data available.	No data available.	No data available.
Crystalline silica (Quartz) (respirable) - (14808-60-7)	No data available.	100,000.00 - Category: NA	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
1317-65-3	Limestone	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
1332-58-7	Kaolin	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A4
9004-34-6	Cellulose	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
9005-25-8	Pregelatinized Starch	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A4
14808-60-7	Crystalline silica (Quartz) (respirable)	OSHA	Regulated Carcinogen: No;
		NTP	Known: Yes; Suspected: No;
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A2
21645-51-2	Aluminium hydroxide	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
65997-17-3	Glass oxide, glass	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
130885-09-5	Perlite	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable

Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	1A	May cause cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry: No data available.

Symptoms and effects, both acute and delayed:

No specific symptom data available.

Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

Treat symptomatically.

Section 12. Ecological information

Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Glass oxide, glass - (65997-17-3)	> 1,000, Danio rerio	No data available.	No data available.
Perlite - (130885-09-5)	No data available.	No data available.	No data available.
Cellulose - (9004-34-6)	100.00, Fish (Piscis)	No data available.	No data available.
Kaolin - (1332-58-7)	No data available.	No data available.	No data available.
Pregelatinized Starch - (9005-25-8)	No data available.	No data available.	No data available.
Limestone - (1317-65-3)	No data available.	No data available.	No data available.
Aluminium hydroxide - (21645-51-2)	219.00, Fish	0.07, Daphnia magna	0.02, Algae
Crystalline silica (Quartz) (respirable) - (14808-60-7)	No data available.	No data available.	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

Other adverse effects

No data available.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	Not Regulated	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
Transport hazard class(es)	DOT Hazard Class: Not Applicable Sub Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable Sub Class: Not Applicable
Packing group	Not Applicable	Not Applicable	Not Applicable
Environmental hazards	Marine Pollutant: No;		
Special precautions for user	Not Applicable		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0000126-13-6	.alpha.-D-Glucopyranoside, 6-O-acetyl-1,3,4-tris-O-(2-methyl-1-oxopropyl)-.beta.-D-fructofuranosyl, 6-acetate 2,3,4-tris	No		
0025265-77-4	2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Yes		ACTIVE
0060828-78-6	2,6,8-Trimethyl-4-nonyl polyethylene glycol ether	Yes	FRI; XU	ACTIVE
0009004-62-0	2-Hydroxyethyl cellulose	Yes	XU	ACTIVE
0068891-38-3	Alcohols, C12-14, ethoxylated, sulfates, sodium salts	Yes	UVCB XU	ACTIVE
0021645-51-2	Aluminium hydroxide	Yes		ACTIVE

0007631-86-9	Amorphous Silica	Yes		ACTIVE
0007727-43-7	Barium sulfate	Yes		ACTIVE
0012225-18-2	BUTANAMIDE, N-(4-CHLORO-2,5-DIMETHOXYPHENYL)-2-[[2	Yes		ACTIVE
0092704-41-1	calcined china clay	Yes	UVCB	ACTIVE
0000471-34-1	Calcium carbonate	Yes		ACTIVE
0001333-86-4	Carbon black	Yes	UVCB	ACTIVE
0009063-87-0	Carbopol 674	No		
0009004-34-6	Cellulose	Yes	XU	ACTIVE
0001318-59-8	Chlorite (mg al silicate)	No		
0008029-43-4	Corn syrup	Yes	UVCB XU	ACTIVE
0014464-46-1	Cristobalite	Yes		ACTIVE
0014808-60-7	Crystalline silica (Quartz) (respirable)	Yes	Present	
0027138-31-4	dipropylene glycol dibenzoate	Yes		ACTIVE
0068441-17-8	Ethene, homopolymer, oxidized	Yes	UVCB XU	ACTIVE
0068424-16-8	Fatty acids, C14-18 and C16-18-unsatd., calcium salts	Yes	UVCB	ACTIVE
0065997-17-3	Glass oxide, glass	Yes	UVCB	ACTIVE
0001309-37-1	Iron oxide	Yes		ACTIVE
0001332-58-7	Kaolin	Yes	UVCB	ACTIVE
0068855-54-9	Kieselguhr,soda ash flux-calcined	Yes	UVCB	ACTIVE
0001317-65-3	Limestone	Yes	UVCB	ACTIVE
0072623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil-unspecified	Yes	UVCB	ACTIVE
0072623-87-1	Lubricating Oils (petroleum), C20-50, hydrotreated neutral oil-based	Yes	UVCB	ACTIVE
0012174-11-7	Magnesium aluminium silicate	No		
0014807-96-6	Magnesium silicate talc	Yes		ACTIVE
0012001-26-2	MICA	Yes		ACTIVE
0130885-09-5	Perlite	No		
0009002-88-4	Polyethylene	Yes	XU	ACTIVE
0009002-89-5	Polyvinyl alcohol	Yes	XU	ACTIVE
0009005-25-8	Pregelatinized Starch	Yes	XU	ACTIVE
0001344-00-9	Silicic acid, aluminum sodium salt	Yes		ACTIVE
0009005-27-0	Starch, 2-hydroxyethyl ether	Yes	XU	ACTIVE
0013463-67-7	Titanium dioxide	Yes		ACTIVE

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Glass oxide, glass

Proposition 65 - Carcinogens (>0.0%):

Crystalline silica (Quartz) (respirable)

Magnesium aluminium silicate

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:



WARNING: This product can expose you to chemicals including [Crystalline silica (Quartz) (respirable), Magnesium aluminum silicate], which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Section 16. Other information

Revision Date 07/24/2024

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H350 May cause cancer.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

End of Document

SAFETY DATA SHEET

1. Identification

Product identifier	Mineral Board Formula 7C
Other means of identification	
Synonyms	Acoustiform, Alaska, Avalon, Avalon Dimensions, Baroque, Baroque Customeline, Fine Fissured, Fine Fissured Customline, Grenada, Rio, Sand Micro, Sand Micro Customline, School Board, Serene
Recommended use	Contact manufacturer/ supplier
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	CertainTeed Ceilings
Address	20 Moores Road Malvern, PA 19355
Telephone	800-823-233-8990
Website	www.certainteed.com/ceilings
E-mail	CertainTeed-EHS@saint-gobain.com
Emergency phone number	3E Global Incident Hotline 1 760 476 3962 1 866 519 4752 (Toll Free) Access Code: 336250

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The product does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	If exposed or concerned: Get medical advice/attention.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Perlite		93763-70-3	30 - 60
Fibrous glass		65997-17-3	15 - 40
Cellulose		9004-34-6	10 - 30
Amylodextrin		9005-84-9	5 - 10
Kaolin Clay		1332-58-7	1 - 5
Limestone		1317-65-3	1 - 5
Nepheline Syenite		37244-96-5	0.1 - 1

Chemical name	Common name and synonyms	CAS number	%
Polyvinyl Alcohol		9002-89-5	0.1 - 1
Talc		14807-96-6	0.1 - 1
Titanium Dioxide		13463-67-7	0.1 - 1

Composition comments The exact concentrations of the above listed chemicals are being withheld as a trade secret. All concentrations are in percent by weight. Non-classification as a carcinogen is based on non-inhalable form of the product. Listings for Talc and Titanium Dioxide note that the substance must be respirable. IARC: Talc not containing asbestos fibers is not classifiable as a human carcinogen (Group 3)

4. First-aid measures

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard. Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Not likely, due to the form of the product. Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Get medical attention if symptoms occur.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical No unusual fire or explosion hazards noted.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Avoid inhalation of dust. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Keep away from heat. Store in a dry place.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin Clay (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Limestone (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Kaolin Clay (CAS 1332-58-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Talc (CAS 14807-96-6)	TWA	0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
Titanium Dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	
Kaolin Clay (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	2.5 mg/m3	Respirable finescale particles
		0.2 mg/m3	Respirable nanoscale particles

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Talc (CAS 14807-96-6)	IDLH	1000 mg/m3
Titanium Dioxide (CAS 13463-67-7)	IDLH	5000 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Fibrous glass (CAS 65997-17-3)	TWA	5 mg/m3	fibers, total dust
Kaolin Clay (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear protective gloves.

Other

Not normally needed.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Solid.

Color

according to product specification

Odor

Not available.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits**Explosive limit - lower (%)**

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Relative density

Not available.

Solubility(ies)**Solubility (water)**

Not available.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	2.00 - 2.50
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
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Information on toxicological effects

Acute toxicity	Not known.
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Components	Species	Test Results
Kaolin Clay (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Titanium Dioxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Hamster	>= 10000 mg/kg
Oral		
LD50	Rat	> 10000 mg/kg
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.	
Serious eye damage/eye irritation	Due to partial or complete lack of data the classification is not possible.	
Respiratory or skin sensitization		
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	Due to partial or complete lack of data the classification is not possible.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Reference to chemical component(s) listed are based on unbound respirable particles and are not generally applicable to product as supplied.	

IARC Monographs. Overall Evaluation of Carcinogenicity

Polyvinyl Alcohol (CAS 9002-89-5)
Talc (CAS 14807-96-6)

3 Not classifiable as to carcinogenicity to humans.
2B Possibly carcinogenic to humans.
3 Not classifiable as to carcinogenicity to humans.
2B Possibly carcinogenic to humans.

Titanium Dioxide (CAS 13463-67-7)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Chronic effects	None known.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Titanium Dioxide (CAS 13463-67-7)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50 Water flea (<i>Daphnia magna</i>)	> 1000 mg/l, 48 hours
Fish	LC50 Mummichog (<i>Fundulus heteroclitus</i>)	> 1000 mg/l, 96 hours

Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations**California Proposition 65**

This product, as supplied, does not contain any form of chemical regulated by California Prop 65 but note that Talc (CAS 14807-96-6) and Titanium Dioxide (CAS 13463-67-7) are bound in the paint used to coat this product.

For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 01-03-2024
Version # 01

Disclaimer

CertainTeed Ceilings cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

1. Identification

Product identifier Mineral Board Formula 6S

Other means of identification
Synonyms Cashmere; Cashmere Customline; Cashmere High NRC; Cashmere Style Edge; Fine Fissured High NRC; Sereno Fine Fissured; Sky

Recommended use Contact manufacturer/ supplier

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information
Manufacturer

Company name CertainTeed Ceilings
Address 20 Moores Road
 Malvern, PA 19355
Telephone 800-823-233-8990
Website www.certainteed.com/ceilings
E-mail CertainTeed-EHS@saint-gobain.com
Emergency phone number 3E Global Incident Hotline
 1 760 476 3962
 1 866 519 4752 (Toll Free)
 Access Code: 336250

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.
Hazard statement The product does not meet the criteria for classification.
Precautionary statement

Prevention Observe good industrial hygiene practices.
Response Wash hands after handling.
Storage Store away from incompatible materials.
Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Fibrous glass		65997-17-3	60 - 80
Perlite		93763-70-3	10 - 30
Amylodextrin		9005-84-9	7 - 13
Cellulose		9004-34-6	7 - 13
Kaolin Clay		1332-58-7	1 - 5
Limestone		1317-65-3	1 - 5
Nepheline Syenite		37244-96-5	0.1 - 1
Talc		14807-96-6	0.1 - 1

Chemical name	Common name and synonyms	CAS number	%
Titanium Dioxide		13463-67-7	0.1 - 1
Vinyl chloride		25037-78-9	0.1 - 1

Composition comments The exact concentrations of the above listed chemicals are being withheld as a trade secret. All concentrations are in percent by weight. Non-classification as a carcinogen is based on non-inhalable form of the product. Listings for Talc and Titanium Dioxide note that the substance must be respirable. IARC: Talc not containing asbestos fibers is not classifiable as a human carcinogen (Group 3)

4. First-aid measures

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard. Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Not likely, due to the form of the product. Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Get medical attention if symptoms occur.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical No unusual fire or explosion hazards noted.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use water spray to cool unopened containers.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Avoid inhalation of dust. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Keep away from heat. Store in a dry place.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Kaolin Clay (CAS 1332-58-7)	PEL	5 mg/m ³	Respirable fraction.

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	15 mg/m3	Total dust.
		5 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Kaolin Clay (CAS 1332-58-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Talc (CAS 14807-96-6)	TWA	0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
		5 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	
Kaolin Clay (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	2.5 mg/m3	Respirable finescale particles
		0.2 mg/m3	Respirable nanoscale particles

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Talc (CAS 14807-96-6)	IDLH	1000 mg/m3
Titanium Dioxide (CAS 13463-67-7)	IDLH	5000 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value	Form
Cellulose (CAS 9004-34-6)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Fibrous glass (CAS 65997-17-3)	TWA	5 mg/m ³	fibers, total dust
Kaolin Clay (CAS 1332-58-7)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Limestone (CAS 1317-65-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Talc (CAS 14807-96-6)	TWA	2 mg/m ³	Respirable.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear protective gloves.

Other

Not normally needed.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Solid.

Color

according to product specification

Odor

Not available.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits**Explosive limit - lower (%)**

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Relative density

Not available.

Solubility(ies)**Solubility (water)**

Not available.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	2.00 - 2.50
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
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Information on toxicological effects

Acute toxicity	Not known.
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Components	Species	Test Results
Kaolin Clay (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Titanium Dioxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Hamster	>= 10000 mg/kg
Oral		
LD50	Rat	> 10000 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.	
Respiratory or skin sensitization		
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	Due to partial or complete lack of data the classification is not possible.	
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.	
Carcinogenicity	Reference to chemical component(s) listed are based on unbound respirable particles and are not generally applicable to product as supplied.	

IARC Monographs. Overall Evaluation of Carcinogenicity

Talc (CAS 14807-96-6)

2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans.

Titanium Dioxide (CAS 13463-67-7)

2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Chronic effects Not expected to be hazardous by OSHA criteria.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Titanium Dioxide (CAS 13463-67-7)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (<i>Fundulus heteroclitus</i>) > 1000 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations**California Proposition 65**

This product, as supplied, does not contain any form of chemical regulated by California Prop 65 but note that Talc (CAS 14807-96-6) and Titanium Dioxide (CAS 13463-67-7) are bound in the paint used to coat this product.

For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 01-03-2024
Version # 01

Disclaimer

CertainTeed Ceilings cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

MATERIAL SAFETY DATA SHEETS

Material Safety Data Sheets are used to supply information about any purchased product which may contain any hazardous or toxic substances.

With this in mind, Suspended Ceiling Systems produced by ROCKFON fall under the classification of “Articles” as defined by OSHA Standard 1910.1200, Paragraph “C”. By this definition, an “Article” is a manufactured item which:

- I. Is formed to a specific shape or design during manufacture, or
- II. Has end use function(s) dependent in whole, or in part, upon its shape or design during end use, and
- III. Which does not release, or otherwise result in exposure to a hazardous chemical under normal conditions of use.

Products classified as “Articles” are exempt under the standard and therefore, do not require labels or data sheets.

Sincerely,

ROCKFON, LLC

FIRESTOP AND FIREPROOFING

- 1. HILTI - CP 506 SMOKE & ACOUSTICAL SEALANT**
- 2. HILTI – CFS-S ACR / CP 606 FIRESTOP SEALANT**
- 3. HILTI - CFS-SP WB FIRESTOP JOINT SPRAY**
- 4. HILTI - MINERAL WOOL / CP 777 SPEED PLUG**
- 5. GRACE – MONOKOTE MK-6**

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 10/24/2025

Issue date: 10/24/2025

Supersedes: 6/20/2024

Version: 5.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Product name	CP 506 / CS-ADH ACR 310
Product code	BU Fire Protection

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	: sealant
Recommended use	: Adhesives, sealants

1.4. Supplier's details

Supplier

Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
US TX 75024 Plano
USA
T +1 9724035800
1-800-879-8000 toll free, F +1 918 254 0522
us-sales@hilti.com

Department issuing data specification sheet

Hilti AG
Feldkircher Strasse
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-fire.protection@hilti.com

1.5. Emergency phone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity (GHS US)

Not applicable

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Calcium carbonate	CAS-No.: 1317-65-3	40 – 60	Not classified
glycerol	CAS-No.: 56-81-5	1 – 2.5	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	Rinse eyes with water as a precaution.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	None under normal conditions.
Symptoms/effects after skin contact	None under normal conditions.
Symptoms/effects after eye contact	None under normal conditions.
Symptoms/effects after ingestion	None under normal conditions.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	No fire hazard.
Explosion hazard	No direct explosion hazard.
Hazardous decomposition products in case of fire	Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Do not enter fire area without proper protective equipment, including respiratory protection.
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CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions

: Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

See Section 8, Exposure controls and personal protection, For further information refer to section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling

Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

Keep in a cool, well-ventilated place away from heat.

Storage conditions

Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products

Strong bases. Strong acids.

Incompatible materials

Sources of ignition. Direct sunlight.

Storage temperature

41 – 77 °F

Packaging materials

Store always product in container of same material as original container.

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
No respiratory protection needed under normal use conditions

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Pasty.
Colour	Colourless
Odour	characteristic
Odour threshold	Not determined
pH	Not determined
Melting point	Not applicable
Freezing point	No data available
Boiling point	> 100 °C
Flash point	> 100 °C
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	23 hPa
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	1.5 – 1.6 g/cm ³
Molecular mass	Not determined
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

VOC content	43.21 g/l ASTM D 2369 – 20, SCAQMD 1168 / All Other Architectural Sealants (limit 50g/L)
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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

Calcium carbonate (1317-65-3)	
LD50 oral rat	> 5000 mg/kg
glycerol (56-81-5)	
LD50 oral rat	27200 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Female, Experimental value, Oral, 10 day(s))
LD50 dermal	56750 mg/kg (4 day(s), Guinea pig, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 5.85 mg/l (Equivalent or similar to OECD 412, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Skin corrosion/irritation	Not classified pH: Not determined
Serious eye damage/irritation	Not classified pH: Not determined
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	No data available
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	None under normal conditions.
Symptoms/effects after skin contact	None under normal conditions.
Symptoms/effects after eye contact	None under normal conditions.
Symptoms/effects after ingestion	None under normal conditions.

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Calcium carbonate (1317-65-3)	
LC50 - Fish [1]	> 10000 mg/l (Oncorhynchus mykiss (rainbow trout))
EC50 - Crustacea [1]	> 1000 mg/l (Daphnia magna (Water flea))
EC50 72h - Algae [1]	289 mg/l Desmodesmus subspicatus (green algae)
NOEC chronic algae	75 mg/l
glycerol (56-81-5)	
LC50 - Fish [1]	54000 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 10000 mg/l (24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability

CP 506 / CS-ADH ACR 310	
Persistence and degradability	Not established.
glycerol (56-81-5)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

CP 506 / CS-ADH ACR 310	
Bioaccumulative potential	Not established.
glycerol (56-81-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.75 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

glycerol (56-81-5)	
Surface tension	63 mN/m (20 °C, 1000 g/l)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Other information

Avoid release to the environment.

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	Disposal must be done according to official regulations.
Waste treatment methods	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	Recycle the material as far as possible. Dispose in a safe manner in accordance with local/national regulations. Disposal must be done according to official regulations.
Additional information	Do not re-use empty containers.
Ecological waste information	Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

DOT
No data available

TDG
No data available

IMDG
No data available

IATA
No data available

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date 10/24/2025

Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information None.

Abbreviations and acronyms	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue

CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Abbreviations and acronyms	
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

NFPA health hazard

1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

1 - Materials that must be preheated before ignition can occur.

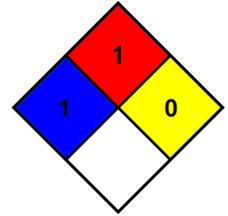
CP 506 / CS-ADH ACR 310

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

B - Safety glasses, Gloves

Indication of changes:			
Section	Changed item	Change	Comments
			29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SDS_US_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 10/28/2025

Issue date: 10/28/2025

Supersedes: 3/26/2025

Version: 6.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Trade name	CFS-S ACR / CP 606
Product code	BU Fire Protection



1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	Flexible firestop sealant
Recommended use	Adhesives, sealants

1.4. Supplier's details

Supplier

Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
US TX 75024 Plano
USA
T +1 9724035800
1-800-879-8000 toll free, F +1 918 254 0522
us-sales@hilti.com

Department issuing data specification sheet

Hilti AG
Feldkircher Strasse
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-fire.protection@hilti.com

1.5. Emergency phone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.5. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Calcium carbonate	CAS-No.: 1317-65-3	40-60	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion	Get medical advice/attention if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.
Symptoms/effects after skin contact	None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	None under normal conditions.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Carbon dioxide. Sand. Water spray. Dry powder. Foam.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	No fire hazard.
Explosion hazard	No direct explosion hazard.
Hazardous decomposition products in case of fire	Carbon dioxide. Carbon monoxide.

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
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For non-emergency personnel

Protective equipment	Wear recommended personal protective equipment.
Emergency procedures	Ventilate spillage area. Evacuate unnecessary personnel.

For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	Ventilate area. Evacuate unnecessary personnel.
Environmental precautions	Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment	Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up	Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

See Section 8, Exposure controls and personal protection, For further information refer to section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	Keep in a cool, well-ventilated place away from heat.
Storage conditions	Store in a dry place. Keep container closed when not in use.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	35 – 95 °F
Packaging materials	Store always product in container of same material as original container.

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CFS-S ACR / CP 606	
No additional information available	
Calcium carbonate (1317-65-3)	
No additional information available	
USA - OSHA - Occupational Exposure Limits	
Local name	Calcium Carbonate (Limestone; Marble)
OSHA PEL TWA	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Additional information The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.
Environmental exposure controls Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Hand protection:				
Protective gloves. ISO 374-1. Wear protective gloves.				
Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4	
Eye protection:				
Chemical goggles or safety glasses. Use eye protection according to EN 166.				
Skin and body protection:				
Wear suitable protective clothing				
Respiratory protection:				
No respiratory protection needed under normal use conditions				

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Pasty.
Colour	red white Grey
Odour	characteristic
Odour threshold	Not determined
pH	≈ 9 Not applicable
Melting point	No data available
Freezing point	Not applicable
Boiling point	No data available
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	1.6 g/cm ³
Molecular mass	Not determined
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Viscosity, kinematic	Not applicable
Viscosity, dynamic	No data available
Explosive limits	Not applicable
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

VOC content 49.5 g/l ASTM D 2369 – 20, SCAQMD 1168 / All Other Architectural Sealants (limit 50g/L)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

Calcium carbonate (1317-65-3)	
LD50 oral rat	> 5000 mg/kg
Skin corrosion/irritation	Not classified pH: ≈ 9 Not applicable
Serious eye damage/irritation	Not classified pH: ≈ 9 Not applicable
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	Not applicable
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.
Symptoms/effects after skin contact	None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion	None under normal conditions.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
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Calcium carbonate (1317-65-3)	
LC50 - Fish [1]	> 10000 mg/l (Oncorhynchus mykiss (rainbow trout))
EC50 - Crustacea [1]	> 1000 mg/l (Daphnia magna (Water flea))
EC50 72h - Algae [1]	289 mg/l Desmodesmus subspicatus (green algae)
NOEC chronic algae	75 mg/l

12.2. Persistence and degradability

CFS-S ACR / CP 606	
Persistence and degradability	Not established.

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.3. Bioaccumulative potential

CFS-S ACR / CP 606	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	Disposal must be done according to official regulations.
Waste treatment methods	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	Recycle the material as far as possible. Disposal must be done according to official regulations.
Additional information	Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

10/28/2025

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

None.

Abbreviations and acronyms	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Abbreviations and acronyms	
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

CFS-S ACR / CP 606

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

NFPA health hazard

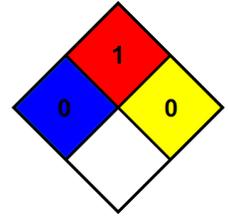
0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

B - Safety glasses, Gloves

Indication of changes:			
Section	Changed item	Change	Comments
			29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SDS_US_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 11/3/2025

Issue date: 11/3/2025 Supersedes: 9/30/2025

Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Trade name	CFS-SP WB (from July 2025)
Product code	BU Fire Protection



1.2. Other means of identification

Other means of identification	The content of this document applies exclusively to products with an expiration date on or after July 1st, 2026
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1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	Flexible joint spray
Recommended use	For professional users only

1.4. Supplier's details

Supplier Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway US TX 75024 Plano USA T +1 9724035800 1-800-879-8000 toll free, F +1 918 254 0522 us-sales@hilti.com	Department issuing data specification sheet Hilti AG Feldkircher Strasse 100 FL 9494 Schaan Liechtenstein T +423 234 2111 product.compliance-fire.protection@hilti.com
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1.5. Emergency phone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Full text of H-statements: see section 16		

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US)

Hazard statements (GHS US)

Precautionary statements (GHS US)

Warning

H361 - Suspected of damaging fertility or the unborn child.

P280 - Wear eye protection, protective clothing, protective gloves.

P308+P313 - If exposed or concerned: Get medical advice/attention.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
diisononyl phthalate	CAS-No.: 28553-12-0	5 – 10	Not classified
hexaboron dizinc undecaoxide	CAS-No.: 12767-90-7	1 - 5	Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general

Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation

Get medical advice/attention if you feel unwell. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion

Get medical advice/attention if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	Carbon dioxide. Carbon monoxide.
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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For emergency responders

Protective equipment	For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.
Environmental precautions	Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up	Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.
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For further information refer to section 13, See Section 8, Exposure controls and personal protection

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Pasty.
Colour	white red Grey
Odour	characteristic
Odour threshold	Not determined
pH	≈ 8.6
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not applicable. Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	1.28 kg/l
Molecular mass	Not determined
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

VOC content	7.9 mg/l ASTM D 2369-20, SCAQMD 1113 / Fire-Proofing Coatings (Limit Value 150g/L)
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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

diisononyl phthalate (28553-12-0)	
LD50 oral rat	> 10000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	50000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg bodyweight (24 h, Rabbit, Female, Experimental value, Dermal, 14 day(s))
LD50 dermal	3160 mg/kg
LC50 Inhalation - Rat	> 4.4 mg/l air (4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 017 day(s))
hexaboron dizinc undecaoxide (12767-90-7)	
LD50 oral rat	> 5000 mg/kg bodyweight (FIFRA (40 CFR), Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Skin, 14 day(s))
LC50 Inhalation - Rat	> 4.95 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value of similar product, Inhalation (dust), 14 day(s))

Skin corrosion/irritation	Not classified pH: ≈ 8.6
Serious eye damage/irritation	Not classified pH: ≈ 8.6
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	No data available
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

diisononyl phthalate (28553-12-0)	
LC50 - Fish [1]	> 102 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	> 74 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	> 88 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
hexaboron dizinc undecaoxide (12767-90-7)	
LC50 - Fish [1]	79.7 mg/l Freshwater fish
LC50 - Fish [2]	74 mg/l Marine water fish

12.2. Persistence and degradability

CFS-SP WB (from July 2025)	
Persistence and degradability	Not established.
diisononyl phthalate (28553-12-0)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
hexaboron dizinc undecaoxide (12767-90-7)	
Not rapidly degradable	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

CFS-SP WB (from July 2025)	
Bioaccumulative potential	Not established.
diisononyl phthalate (28553-12-0)	
BCF - Fish [1]	< 3 l/kg (14 day(s), Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	8.8 – 9.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
hexaboron dizinc undecaoxide (12767-90-7)	
Bioaccumulative potential	No bioaccumulation data available.

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.4. Mobility in soil

diisononyl phthalate (28553-12-0)	
Surface tension	30.7 mN/m (20 °C, 100 vol %, Wilhelmy plate method: surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	6 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.
hexaboron dizinc undecaoxide (12767-90-7)	
Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

Other information Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods Dispose in a safe manner in accordance with local/national regulations.
 Product/Packaging disposal recommendations Recycle the material as far as possible.
 Ecological waste information Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

CFS-SP WB (from July 2025)

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

CFS-SP WB (from July 2025)

U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

WARNING:

This product can expose you to diisononyl phthalate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

11/03/2025

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

None.

Full text of hazard classes and H-statements

H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard

1 - Materials that, under emergency conditions, can cause significant irritation.

CFS-SP WB (from July 2025)

Safety Data Sheet

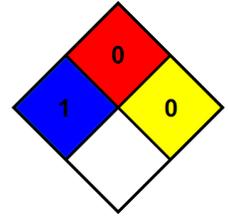
according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

NFPA fire hazard

0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

0 Minimal Hazard - Materials that will not burn

Physical

0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

B - Safety glasses, Gloves

Indication of changes:			
Section	Changed item	Change	Comments
		Modified	29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SDS_US_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 2/6/2025

Issue date: 2/6/2025

Supersedes: 12/6/2024

Version: 1.6

SECTION 1: Identification

1.1. Identification

Product form	Article
Product name	Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier
Product code	BU Fire Protection Article
Other means of identification	Mineral wool products: CP 777 CP 767 CFS-TTS MD P CFS-TTS MD C CFS-CO Mineral wool FS boards: CP 670 CP 673 CP 676 CFS-CT B CFS-CT HDB Insulated sleeve: CP 645 Cavity Barrier: CFS-VB E60 CFS-VB E120 CFS-NVB E120

1.2. Recommended use and restrictions on use

Use of the substance/mixture	Construction products
Restrictions on use	Building and construction work

1.3. Supplier

Supplier Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway US TX 75024 Plano USA T +1 9724035800 1-800-879-8000 toll free, F +1 918 254 0522 us-sales@hilti.com	Department issuing data specification sheet Hilti AG Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111 product.compliance-fire.protection@hilti.com
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1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
------------------	--

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

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2.3. Other hazards which do not result in classification

Other hazards which do not result in classification A Safety Data Sheet is not required due to the classification of these products as "articles" according to Regulation (EC) No. 1907/2006 of 18 December 2006 (EU) / 29CFR 1910.1200 (U.S.A.). Consequently, these products are exempted from CLP / OSHA Labeling and SDS requirements.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS-US classification
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na ₂ O+K ₂ O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Nota Q conditions		-	≥ 60	Not classified
formaldehyde ...%		CAS-No.: 50-00-0	< 0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.
First-aid measures after skin contact	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth out with water. Drink plenty of water.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	The product itself does not burn. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	Wear recommended personal protective equipment.
Emergency procedures	Evacuate unnecessary personnel.
Measures in case of dust release	Wear suitable respiratory protection.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Minimise generation of dust.
-------------------------	------------------------------

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust.
Hygiene measures	Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Keep container closed when not in use. Avoid creating or spreading dust. Store in a dry place.
--------------------	--

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

No additional information available

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

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formaldehyde ...% (50-00-0)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Formaldehyde
ACGIH OEL TWA	0.1 ppm
ACGIH OEL STEL	0.3 ppm
ACGIH OEL C	0.3 ppm
Remark (ACGIH)	URT & eye irr; SEN; A2
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Formaldehyde
OSHA PEL TWA	0.75 ppm OSHA 1910.1048(c)(1)
OSHA PEL STEL	2 ppm OSHA 1910.1048(c)(2)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na₂O+K₂O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Nota Q conditions	
No additional information available	

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Protective clothing. Gloves. Safety glasses.

Hand protection:				
Wear protective gloves.				
Type	Material	Permeation	Thickness (mm)	Penetration
Reusable gloves				
Eye protection:				
Chemical goggles or safety glasses				
Skin and body protection:				
Wear suitable protective clothing				
Respiratory protection:				
In case of dust formation use respirator with filter: Dust production: dust mask with filter type P2				

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

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Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Fibrous.
Colour	Various colours
Odour	odourless
Odour threshold	No data available
pH	No data available
Melting point	> 1000 °C
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not flammable. Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	20 – 250 kg/m ³
Solubility	Insoluble.
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

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10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

formaldehyde ...% (50-00-0)	
LD50 oral	600 mg/kg
LD50 dermal	270 mg/kg
LC50 Inhalation - Rat [ppm]	480 ppm

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

formaldehyde ...% (50-00-0)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens

Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	No data available
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
-------------------	---

formaldehyde ...% (50-00-0)	
EC50 - Crustacea [1]	2 mg/l
NOEC chronic crustacea	1 mg/l

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.2. Persistence and degradability

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

14.6. Special precautions for user

DOT
Not applicable

TDG
Not applicable

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

IMDG

Not applicable

IATA

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
formaldehyde ...%	50-00-0	Present	Active	
Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na ₂ O+K ₂ O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the Nota Q conditions		Not present	-	

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

formaldehyde ...%	CAS-No. 50-00-0	< 0.1%
-------------------	-----------------	--------

formaldehyde ...% (50-00-0)

Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	100 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

15.2. International regulations

Mineral wool products / FS boards / Insulated sleeve/ Cavity Barrier

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

formaldehyde ...% (50-00-0)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.3. US State regulations

WARNING: This product can expose you to Formaldehyde (gas), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

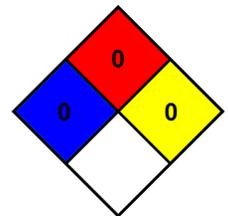
SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date 02/06/2025
 Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
 Other information None.

Full text of H-statements	
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.

NFPA health hazard 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
 NFPA fire hazard 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
 NFPA reactivity 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:			
Section	Changed item	Change	Comments
			add product name: mineral wool

SDS_US_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Safety Data Sheet

Printing date 10/18/2017

Version Number 1.2

Reviewed on 10/18/2017

1 Identification

Product identifier

Trade name: ***MK 6-HY***

SDS ID Number: 2684

Relevant identified uses of the substance or mixture, and uses advised against
Specialty construction product. Not intended for other uses

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Classification of the substance or mixture

Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable silica dust may cause silicosis. Occupational exposure to respirable crystalline silica should be monitored and controlled.

This product should be handled with care to avoid dust generation.
May cause cancer. Route of exposure: Inhalation.

Label elements:

Hazard pictograms



GHS08

Danger

Precautionary statements

(Cont. on page 2)

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Trade name: MK 6-HY

(Cont. from page 1)

Do not handle until all safety precautions have been read and understood.
 Avoid breathing dust.
 Wash thoroughly after handling.
 In case of inadequate ventilation wear respiratory protection.
 Dispose of contents container in accordance with all applicable regulations.

Wash contaminated clothing before reuse.
 If inhaled, get medical advice/attention if you feel unwell.

May cause skin and eye irritation.
 Use personal protection equipment as required.

FOR PROFESSIONAL USE ONLY

NFPA ratings (scale 0 - 4)



Health = 1
 Fire = 0
 Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *1
 Flammability = 0
 Reactivity = 0

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients**Chemical characterization: Mixture**

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

Hazardous components:

7778-18-9	Calcium sulfate, natural	50-90%
14808-60-7	Quartz (SiO ₂)	< 2.0%
1317-65-3	Calcium carbonate	1.0-10.0%

4 First-aid measures**Description of first aid measures****General information:** Get medical advice/attention if you feel unwell.**After inhalation:** If breathing has stopped, give artificial respiration then oxygen if needed.**After skin contact:**

Immediately wash contaminated skin with soap or mild detergent and water. If this chemical soaks clothing, immediately remove clothing and wash skin.

If skin irritation occurs, consult a doctor.

After eye contact:

Rinse cautiously with water for several minutes.

If eye irritation occurs, consult a doctor.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

Information for doctor:**Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Cont. on page 3)

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Trade name: MK 6-HY

(Cont. from page 2)

Indication of any immediate medical attention and special treatment needed No further relevant information available.**5 Fire-fighting measures****Special hazards arising from the substance or mixture** No further relevant information available.**Additional information** No further relevant information available.**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.**Methods and material for containment and cleaning up:**Sweep up spilled product into receptacles.
Avoid formation of dust.
Vacuuming or wet sweeping may be used to avoid dust dispersal.
Dispose contaminated material as waste according to section 13 of the SDS.**Reference to other sections**See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.**7 Handling and storage****Handling:****Precautions for safe handling**Do not breathe dust.
Fit dust covers to mixers.
Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating.
Avoid contact with skin.
Avoid contact with eyes.**Conditions for safe storage, including any incompatibilities****Storage:****Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.**Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection****Additional information about design of technical systems:** No further data; see item 7.**Control parameters****Components with limit values that require monitoring at the workplace:****1317-65-3 Calcium carbonate**TWA (USA) Short-term value: 10 mg/m³, mg/m³ ppm
Long-term value: 10 mg/m³, mg/m³ ppm
(Particulate matter no asbestos)**14808-60-7 Quartz (SiO₂)**

PEL (USA) see Quartz listing

(Cont. on page 4)

USGHS

Trade name: MK 6-HY

(Cont. from page 3)

REL (USA)	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m ³ * as respirable fraction

Additional Occupational Exposure Limit Values for possible hazards during processing:

In addition to the exposure limits referenced above, the following non-specific limits for dust apply to this product; OSHA, 15 mg/m³-TWA for Total Dust and 5 mg/m³-TWA as Respirable Dust, ACGIH, 10 mg/m³-TWA as Total Dust and 3 mg/m³-TWA as Respirable Dust.

Additional information:

The lists that were valid during the creation were used as basis.

Canadian employers must consult the exposure limits in their province.

Work/Hygienic Practices: The usual precautionary measures for handling chemicals should be followed.

Exposure controls

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas. Remove and wash soiled clothing.

Personal protective equipment:**General protective and hygienic measures:**

Store protective clothing separately.

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

Body protection:

Use personal protective equipment as required.

Take off contaminated clothing.

9 Physical and chemical properties**Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Powder
Color:	Grey
Odor:	Earthy
Odor threshold:	Not determined.

pH-value (~): Not applicable.

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

(Cont. on page 5)

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Trade name: *MK 6-HY*

(Cont. from page 4)

Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
VOC Content (max):	Not determined.
Vapor pressure:	Not applicable.
Density: (~)	Not determined.
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Molecular weight	Not applicable.
Other information	No further relevant information available.

* **10 Stability and reactivity****Reactivity** Stable under normal conditions.**Chemical stability****Thermal decomposition:** No decomposition if used according to specifications.**Possibility of hazardous reactions** No further relevant information available.**Conditions to avoid** No further relevant information available.**Incompatible materials:** No further relevant information available.**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Cutting or welding may generate Sulfur dioxide.

Additional information: See section 7 for information on handling, storage and conditions to be avoided.* **11 Toxicological information****Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****1317-65-3 Calcium carbonate**

Oral	LD50	6450 mg/kg (rat)
	LC50, 96h	10.000 mg/l (fish)

Primary irritant effect:**on the skin:** No irritating effect expected**on the eye:** No irritating effect expected**inhalation:** No irritating effect expected**Additional toxicological information:** Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

(Cont. on page 6)

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Reviewed on 10/18/2017

Trade name: **MK 6-HY**

(Cont. from page 5)

Carcinogenic categories**IARC (International Agency for Research on Cancer) Human Carcinogenicity:**
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

14808-60-7	Quartz (SiO ₂)	1
9003-53-6	Expanded Polystyrene	3

NTP (National Toxicology Program)**K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic**

14808-60-7	Quartz (SiO ₂)	K
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OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information**Toxicity****Aquatic toxicity:****1317-65-3 Calcium carbonate**

EC50, 48h 1.000 mg/l (daphnia magna)

EC50, 72h 10.000 mg/l (algae)

Persistence and degradability No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:** Not known to be hazardous to water.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.**13 Disposal considerations****Waste treatment methods** Comply with Federal, State and local regulations.**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**14 Transport information****UN-Number**

DOT, IMDG, IATA Not applicable.

UN proper shipping name

DOT, IMDG, IATA Not applicable.

(Cont. on page 7)

USGHS

Safety Data Sheet

Printing date 10/18/2017

Version Number 1.2

Reviewed on 10/18/2017

Trade name: *MK 6-HY*

(Cont. from page 6)

Transport hazard class(es)**DOT, IMDG, IATA**

Class Not applicable.

Packing group**DOT, IMDG, IATA**

Not applicable.

Environmental hazards:**Marine pollutant:**

No

Special precautions for user Not applicable.**Transport/Additional information:****DOT****Remarks:**

Not Regulated.

Note:

Not Regulated for Canada TDG.

UN "Model Regulation": Not applicable.**15 Regulatory information****SARA (Superfund Amendments and Reauthorization Act)****Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

None of the ingredients is listed.

SARA Section 312/Tier I & II Hazard Categories:

Health Delayed (chronic)	Yes
Health Immediate (acute)	Yes
Flammable	No
Reactive	No
Pressure	No

North America Chemical Inventory Status**TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:

65996-61-4 | Cellulosic Fiber

9003-53-6 | Expanded Polystyrene

California Proposition 65**Chemicals known to cause cancer:**Quartz (SiO₂)**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity Categories**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable**Quartz (SiO₂)

A2

NIOSH-Cancer (National Institute for Occupational Safety and Health)14808-60-7 | Quartz (SiO₂)

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Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L**16 Other information**

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Department issuing SDS:

GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 10/18/2017 / -**The first date of preparation** 08/05/2016**Number of revision times and the latest revision date** 1.2 - 10/18/2017

USGHS

ADHESIVES, CLEANERS AND LUBRICANTS

1. SPRAY ADHESIVES

- a. Trim Tex – 847 Spray Adhesive**
- b. Grabber – Hang Tite 747 Spray Adhesive**

2. TUBE ADHESIVES

- a. Loctite – PL Premium Adhesive**
- b. OSI – QB 300 Construction Adhesive**
- c. OSI – F-38 Drywall Adhesive**
- d. Franklin – Titebond Solvent Free Drywall Adhesive**
- e. Franklin – Titebond FRP Adhesive**
- f. Franklin – Titebond Solvent Based FRP Adhesive**

3. CLEANER

- a. GO – Goof Off Professional Strength Cleaner**

4. LUBRICANTS

- a. WD-40 – WD-40 Aerosol**
- b. Hilti – Spray Lubricant**

Safety Data Sheet

TRIM-TEX 847

SECTION 1: Identification

Trade Name: TRIM-TEX 847

Date Prepared: 02/14/2025

Product Identification:4631

Synonyms: Blend of Petroleum Distillates

Product Use Description: Web Spray Adhesive

Distributed By:

TRIM-TEX INC.
3700 W. PRATT AVE.
Lincolnwood, IL 60712 US

Phone: (847) 679-3000

24 HR Emergency Number: (800) 424-9300

SECTION 2: Hazards Identification

Classifications

Aspiration Hazard - Category 1

Toxic to Reproduction - Category 2

Skin Irritation - Category 2

Eye Irritation - Category 2

Specific Target Organ Toxicity (repeated exposure) - Category 2

Specific Target Organ Toxicity (single exposure) - Category 3

Flammable Aerosols - Category 1

Gasses under pressure - Compressed gas



Compressed Gas

Irritant

Flammable

Health Hazard :inviromental Hazar

Signal Word: Danger

Hazard Statements

Keep out of reach of children.

Read label and SDS before use.

Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

May cause damage to central nervous system through prolonged or repeated exposure via inhalation.

Suspected of damaging fertility or the unborn child

Causes skin irritation

Causes serious eye irritation.

Precautionary Statements

Prevention

Obtain special instructions before use.

Trade Name: TRIM-TEX 847

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Safety Data Sheet

TRIM-TEX 847

Do not handle until all safety precautions have been read and understood.

Avoid breathing mist/spray.

Use only outdoors or in a well-ventilated area.

Keep away from heat, sparks, open flames and hot surfaces. -No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Wash hands and face thoroughly after handling.

Wear protective gloves. Wear eye protection.

Response

If exposed or concerned: Get medical attention.

IF SWALLOWED: Immediately call a poison center or a doctor. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs get medical attention.

Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center or doctor if you feel unwell.

Storage

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Store in a well-ventilated place.

Store locked up.

Disposal

Dispose of contents and container in accordance with all local, regional, and national regulations.

Hazards Not Otherwise Specified

Not applicable

SECTION 3: Composition

Chemical Name	CAS #	Concentration % by Weight
Butane	106-97-8	5 - 10
Hexane	110-54-3	5 - 10
Methyl Acetate	79-20-9	30 - 50
Propane	74-98-6	15 - 20
Parachlorobenzotrifluoride	98-56-6	1 - 5

SECTION 4: First Aid Measures

EMERGENCY OVERVIEW

DANGER. Extremely flammable. Contents under pressure. Harmful or fatal if swallowed. Aspiration hazard if swallowed. Vapor harmful. Keep away from heat and flame. Can cause nervous system depression.

EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs get medical attention. Take off contaminated clothing and wash it before reuse.

INHALATION: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

INGESTION: Harmful or fatal if swallowed. Seek medical attention immediately. Aspiration hazard - this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

SECTION 5: Firefighting Measures

Suitable fire extinguishing media:

Trade Name: TRIM-TEX 847

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TRIM-TEX 847

Use water spray, fog or foam.

Specific hazards arising from the chemical:

Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products:

Carbon Dioxide, Carbon Monoxide

Specific fire-fighting methods:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire fighters:

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode.

SECTION 6: Accidental Release Measures

Personal precautions:

Put on appropriate personal protective equipment (see section 8)

Environmental precautions and clean-up methods:

Stop all leaks. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all ignition sources. Disperse vapors with water spray. Prevent runoff from entering drains, sewers, streams or other bodies of water. Absorb spill with inert material. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

SECTION 7: Handling and Storage

Do not use or store near heat, sparks or open flame. Exposure to temperatures above 120 F may cause bursting. Do not puncture or incinerate container. Store in a cool, dry place. Do not get in eyes, on skin or on clothing. Intentional misuse by deliberately concentrating and inhaling may be harmful or fatal. Keep out of reach of children.

SECTION 8: Exposure Controls/Personal Protection

Butane(106-97-8)	
ACGIH TLV	1000 ppm
Hexane(110-54-3)	
OSHA PEL	500 ppm
ACGIH TLV	50 ppm
Propane(74-98-6)	
ACGIH TLV	1000 ppm
Methyl Acetate(79-20-9)	
ACGIH TLV	200 ppm

Safety Data Sheet

TRIM-TEX 847

Eye Protection: Wear safety glasses or goggles.

Skin Protection: To prevent repeated or prolonged contact, wear impervious gloves (made from rubber, nitrile or neoprene).

Respiratory Protection: When respiratory protection is required use an organic vapor cartridge. A respiratory program that meets OSHA's 29 CFR 1910.34 & ANSI Z88.2 requirements must be followed.

Engineering Controls: Good general ventilation required.

SECTION 9: Physical and Chemical Properties

Property	Value	Property	Value
Appearance	CLEAR SPRAY/MIST	Auto Ignition Temp	NOT AVAILABLE
Boiling Point	NOT AVAILABLE	Color	RED
Decomposition Temperature	NOT AVAILABLE	Evaporation Rate	NOT AVAILABLE
Explosive Limit Ranges	NOT AVAILABLE	Explosive Properties	NOT AVAILABLE
Flash Point	< 0 F (liquid portion)	Melting/Freezing Point	NOT AVAILABLE
Odor	SOLVENT	Odor Threshold	NOT AVAILABLE
Other Information	VOC content (wt. %): 39.8	Oxidizing Properties	NOT AVAILABLE
Partition Coeff	NOT AVAILABLE	Physical State	LIQUID
Relative Density	0.74	Solubility (Water)	INSOLUBLE
Vapor Density	NOT AVAILABLE	Vapor Pressure	NOT AVAILABLE
Viscosity	NOT AVAILABLE	pH	NOT APPLICABLE

SECTION 10: Stability and Reactivity

Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

Chemical Stability

Stable under normal conditions.

Incompatible Materials

Acids and strong oxidizers

Conditions to Avoid

High temperatures, open flames, sparks, welding.

Hazardous Decomposition Products

CO, CO₂

Vapors may ignite at temperatures exceeding flash point.

SECTION 11: Toxicological Information

Primary Route of Entry: Skin contact, inhalation

Acute/Potential Health Effects:

EYES: May cause serious eye irritation. Symptoms include stinging, tearing and redness.

SKIN: May cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying of skin and skin burns.

INHALATION: High vapor/aerosol concentrations (>1000 ppm) are irritating to the eyes and respiratory tract. May cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage.

INGESTION: Harmful or fatal if swallowed. Aspiration hazard - this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

Chronic / Long Term Effects: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Signs and Symptoms of Overexposure: Signs and symptoms of overexposure to this material through breathing, swallowing, and/or passage of material through the skin may include: stomach or intestinal upset (nausea vomiting, diarrhea) irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness).

Safety Data Sheet

TRIM-TEX 847

Target Organ Effects: Central nervous system.

Reproductive/Developmental Information: Suspected of damaging fertility or the unborn child. WARNING: This product can expose you to Hexane which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Carcinogenic Information: This material is not listed as a carcinogen by IARC, NTP or OSHA. WARNING: This product can expose you to para-Chlorobenzotrifluoride which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Acute Toxicity Values:

Hexane: Dermal LD50, rabbit 3000 mg/Kg; Inhalation - LC50, 4 hr, rat 48000 ppm.

Parachlorobenzotrifluoride: LD50 oral rat 13000 mg/l; LC50 inhalation rat 33 mg/l

Methyl Acetate: oral LD50 rat 6482 mg/Kg; inhalation LC50 (rat, 4 hr) >49 mg/l

SECTION 12: Ecological Information

Hexane: LC50, pimephales promelast, 96 h, 2.1 - 2.98 mg/l

Methyl Acetate: LC50 (Fathead Minnow, 96 hr) 320-399 mg/l; EC50 (daphnid, 48 h) 1027 mg/l.

SECTION 13: Disposal Considerations

Waste must be disposed of in accordance with federal, state and local environmental control regulations. See label for further instructions.

SECTION 14: Transport Information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN number 1950

Proper shipping name Aerosols, flammable

Class 2.1

Packing group -

SECTION 15: Regulatory Information

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act)

Hexane

Parachlorobenzotrifluoride

CERCLA RQ (40 CFR 302)

Hexane

5000

LB

Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (40 CFR 372.65)

Hexane

If identified components of this product are **CERCLA** hazardous substances and/or listed under **Sections 302, 304, or 313 of Title III** of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (also known as EPCRA, the Emergency Planning and Community Right-To-Know Act), or under **California Proposition 65** (Safe Drinking Water and Toxic Enforcement Act), they are listed above in Section 15 of this SDS.

If identified components of this product are listed under Section 313, this product contains toxic chemicals subject to the reporting requirements of Section 313. This information must be included in all SDS that are copied and distributed for this material.

Title III Section 311/312 Hazardous Categories - 40 CFR 370.2:

ACUTE (X) Chronic (X) Fire (X) Pressure (X) Reactive () Not Applicable ()

Safety Data Sheet

TRIM-TEX 847

T.S.C.A. Status: All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

RCRA Status: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. If this product becomes hazardous waste it would be assigned RCRA Code(s)

D001

SECTION 16: Other Information

HMIS Ratings :

HEALTH	2
FLAMMABILITY	4
REACTIVITY	0
PERSONAL PROTECTION	G

Disclaimer: This Manufacturer believes that the information contained in the Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of the publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

Preparation/Revision Date: 02/14/2025

Trade Name: TRIM-TEX 847

SDS ID: SDS12389

Product ID: 463124L100483

Revision #: 2

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Revision Date: 02/14/2025

SAFETY DATA SHEET

Section 1: Identification

Product Identification

Product Identifier: Grabber Hang Tite 747 Spray Adhesive
Recommended Use: Adhesive
Use Restrictions: List use restrictions if known

Company Identification

Company: Grabber Construction Products Inc.
Address: 5255 North 11000 West
Highland, Utah 84003
Phone: 1-801-492-3880
Website: www.grabberpro.com
Emergency: 1-801-492-3880

For most current SDS, please visit our website at: www.grabberpro.com/TechnicalDocuments/SDS

Section 2: Hazard(s) Identification

General Information

HAZARD PICTOGRAMS



SIGNAL WORD

Danger

GHS HAZARD STATEMENTS

H222	Extremely flammable aerosol.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.

GHS PRECAUTIONARY STATEMENTS

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P203	Obtain, read and follow all safety instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust, fumes, gas, mist, vapors, or spray.
P264+P265	Wash hands thoroughly after handling. Do not touch eyes.
P271	Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves, eye protection, face protection, and protective clothing.

Response

P301+P316
P302+P352
P304+P340

IF SWALLOWED: Get emergency medical help immediately.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P318

IF exposed or concerned, get medical help.

P319

Get medical help if you feel unwell.

P331

Do NOT induce vomiting.

P332+P317

If skin irritation occurs: Get medical help.

P337+P317

If eye irritation persists: Get medical help.

P362+P364

Take off contaminated clothing and wash it before reuse

Storage

P403+P233

Store in a well-ventilated place. Keep container tightly closed.

P405

Store locked up.

P410+P412

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

P501

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Classification (if applicable)

Flammable Aerosol	Category 1
Aspiration Hazard	Category 1
Skin Irritation	Category 2
Eye Irritation	Category 2A
STOT	Single exposure, category 3, NE
Reproductive Toxicity	Category 2

Section 3: Composition Information

Composition Comments:

Other components are not hazardous or are below required disclosure limits. The exact concentration has been withheld as a trade secret.

Mixtures

Chemical Identity	CAS Number	Content in Percent (%)*
Naphtha, (Petroleum), Hydrotreated Light:	64742-49-0	10-25
Dimethyl Ether	115-10-6	10-25
Acetone	67-64-1	10-25
Cyclohexane	110-82-7	10-25
Propellant, 1,1-Difluoroethane	75-37-6	2.5-10
Propane	74-98-6	2.5-10
Butane	106-97-8	2.5-10
n-Pentane	109-66-0	0.1-1.0
n-Hexane	110-54-3	0.1-1.0

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Provide general supporting measures. . .

Routes of Exposure

Eye Contact:	Rinse with water. Get medical attention if irritation develops and persists.
Skin Contact:	Wash off with soap and water. Get medical attention if irritation develops and persists.
Ingestion:	Rinse mouth. Get medical attention if symptoms occur.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Most Important Symptoms/Effects, Acute and Delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Indication of Immediate Medical Attention and Special Treatment Needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:	Alcohol resistant foam. Dry powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
Special protective equipment and precautions for firefighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions:	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods:	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards:	Extremely flammable aerosol.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and Materials for Containment and Cleaning Up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area

until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental Precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Precautions for Safe Handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for Safe Storage, Including Any Incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits

U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Dimethyl Ether (CAS 115-10-6)	STEL	2 ppm

U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m ³ 1000 ppm
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m ³ 300 ppm
Propane (CAS 74-98-6)		

US. ACGIH Threshold Limit Values

Components	Type	Value
2,2-Dimethylbutane (CAS 75-83-2)	STEL	1000 ppm
	TWA	500 ppm
2,3-Dimethylbutane (CAS 79-29-8)	STEL	1000 ppm
	TWA	500 ppm
2-Methylpentane (CAS 107-83-5)	STEL	1000 ppm
	TWA	500 ppm
3-Methylpentane (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm
Acetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
	Dimethyl Ether (CAS 115-10-6)	Ceiling

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	590 mg/m ³ 300 ppm
Dimethyl Ether (CAS 115-10-6)	Ceiling	0.1 ppm
	TWA	0.016 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m ³ 1000 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1,1-Difluoroethane (CAS 75-37-6)	TWA	2700 mg/m ³ 1000 ppm
Dimethyl Ether (CAS 115-10-6)	TWA	1880 mg/m ³ 1000 ppm

Biological Limit Values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Individual Protection Measures, such as Personal Protective Equipment

General Hygiene Considerations:	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Eye Protection:	Wear safety glasses with side shields (or goggles).
Hand Protection:	Wear appropriate chemical resistant gloves.
Skin and Body Protection:	Wear appropriate chemical resistant clothing.
Respirator Protection:	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.
Thermal Hazards:	Wear appropriate thermal protective clothing, when necessary.

Appropriate Engineering Controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Section 9: Physical and Chemical Properties

Appearance

Physical state	Liquid.
Form	Aerosol.
Color	Not available.
Odor	Not available.
Odor Threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	135.82 °F (57.68 °C) estimated
Flash point	-156.0 °F (-104.4 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit — lower (%)	2.8 % estimated

Flammability limit — upper (%)	21 % estimated
Explosive limit — lower (%)	Not available.
Explosive limit — upper (%)	Not available.
Vapor pressure	299.92 psig @70 °F estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	554.81 °F (290.45 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Specific gravity	0.661 estimated

Section 10: Stability and Reactivity

Description

Reactivity:	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to Avoid:	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known

Section 11: Toxicological Information

Information on Likely Routes of Exposure

Ingestion:	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Inhalation:	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on Toxicological Effects

Acute toxicity:	Species	Test Results
Components		
1,1-Difluoroethane (CAS 75-37-6)		
Acute		
Inhalation		
LC50	Rat	44 - 437500 %, 4 Hours
Acetone (CAS 67-64-1)		
Acute		
Dermal		

LD50	Guinea pig	> 7426 mg/kg, 24 Hours > 9.4 ml/kg, 24 Hours
<i>Inhalation</i> LC50	Rat	55700 ppm, 3 Hours 132 mg/l, 3 Hours 50.1 mg/l
<i>Oral</i> LD50	Rat	5800 mg/kg 2.2 ml/kg
Cyclohexane (CAS 110-82-7)		
Acute <i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i> LC50	Rat	> 32880 mg/m3, 4 Hours > 5540 ppm, 4 Hours
Dimethyl Ether (CAS 115-10-6)		
Acute <i>Inhalation</i> NOEL	Rat	2 ppm, 6 Hours
<i>Oral</i> LD50	Rat	460 mg/kg
Propane (CAS 74-98-6)		
Acute <i>Inhalation</i> LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation:	Causes skin irritation.
Eye damage/eye irritation:	Causes serious eye irritation.
Respiratory sensitization:	No data available.
Skin sensitization:	This product is not expected to cause skin sensitization.
Germ cell mutagenicity:	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure:	May cause drowsiness and dizziness.
Specific target organ toxicity - repeated exposure:	Not classified.
Aspiration hazard:	May be fatal if swallowed and enters airways.
Chronic effects:	Prolonged inhalation may be harmful.

Section 12: Ecological Information (non-mandatory)

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna)
Fish	LC50	Rainbow trout, Donaldson Trout (Oncorhynchus mykiss)
		21.6 - 23.9 mg/l, 48 hours
		4740 - 6330 mg/l, 96 hours
Cyclohexane (CAS 110-82-7)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas)
		23.03 - 42.07 mg/l, 96 hours
Dimethyl Ether (CAS 115-10-6)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex)
Fish	LC50	Striped bass (Morone saxatilis)
		4.3 - 7.8 mg/l, 48 hours
		10.302 - 16.743 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: No data available for this product

Partition coefficient n-octanol / water (log Kow)

1,1-Difluoroethane	0.75
2,2-Dimethylbutane	3.82
2,3-Dimethylbutane	3.42
2-Methylpentane	3.74
3-Methylpentane	3.6
Acetone	-0.24
Cyclohexane	3.44
Dimethyl Ether	0.1
Propane	2.36

Mobility in soil: No data available

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13: Disposal Considerations (non-mandatory)

Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

US RCRA Hazardous Waste U List: Reference

Acetone (CAS 67-64-1)	U002
Cyclohexane (CAS 110-82-7)	U056

Waste from residues/unused products:

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal.
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

Section 14: Transport Information (non-mandatory)

DOT

UN number:	UN1950
UN proper shipping name:	Aerosols, flammable, (each not exceeding 1 L capacity)
Transport hazard class(es)	
Class:	2.1
Subsidiary risk:	-
Label(s):	2.1
Packing group:	Not applicable.
Special precautions for user:	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Special provisions:	N82
Packaging exceptions:	306
Packaging non bulk:	None
Packaging bulk:	None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

UN number:	UN1950
UN proper shipping name:	Aerosols, flammable
Transport hazard class(es)	
Class:	2.1
Subsidiary risk:	-
Label(s):	2.1
Packing group:	Not applicable.
Environment hazards:	Yes
ERG Code	10L
Special precautions for user:	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
Packaging Exceptions	LTD QTY

IMDG

UN number:	UN1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es)	

Class:	2.1
Subsidiary risk:	-
Label(s):	2.1
Packing group:	Not applicable.
Environment hazards	
Marine pollutant	Yes
EmS	F-D, S-U
Special precautions for user:	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

DOT



IATA; IMDG



Marine pollutant



General Information

IMDG Regulated Marine Pollutant.

Section 15: Regulatory Information

United States Federal Regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetone (CAS 67-64-1) Listed.

Cyclohexane (CAS 110-82-7) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity (TPQ)	TPQ, lower value	TPQ, upper value
Phenol	108-95-2	1000		500 lb	10000 lb

SARA 311/312 Hazardous Chemical

No

SARA 313 (TRI reporting)

Chemical Name	CAS Number	% by wt.
Cyclohexane	110-82-7	10 - 20
Ethyl Benzene	100-41-4	0.01 - 0.1
Styrene	100-42-5	0.01 - 0.1

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

1,1-Difluoroethane (CAS 75-37-6)

Dimethyl Ether (CAS 115-10-6)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1) 6532

U.S. State Regulations

US. Massachusetts RTK - Substance List

1,1-Difluoroethane (CAS 75-37-6)

2,2-Dimethylbutane (CAS 75-83-2)

2,3-Dimethylbutane (CAS 79-29-8)

Methylpentane (CAS 107-83-5)

Methylpentane (CAS 96-14-0)

Acetone (CAS 67-64-1)

Cyclohexane (CAS 110-82-7)

Dimethyl Ether (CAS 115-10-6)

Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act

1,1-Difluoroethane (CAS 75-37-6)
2,2-Dimethylbutane (CAS 75-83-2)
2,3-Dimethylbutane (CAS 79-29-8)
2-Methylpentane (CAS 107-83-5)
Acetone (CAS 67-64-1)
Cyclohexane (CAS 110-82-7) Dimethyl Ether (CAS 115-10-6) Propane (CAS 74-98-6)
1,1-Difluoroethane (CAS 75-37-6)
2,2-Dimethylbutane (CAS 75-83-2)

US. Pennsylvania Worker and Community Right-to-Know Law

2,2-Dimethylbutane (CAS 75-83-2)
2,3-Dimethylbutane (CAS 79-29-8)
Methylpentane (CAS 107-83-5)
Methylpentane (CAS 96-14-0)
Acetone (CAS 67-64-1)
Cyclohexane (CAS 110-82-7) Dimethyl Ether (CAS 115-10-6) Propane (CAS 74-98-6)
2,2-Dimethylbutane (CAS 75-83-2)
2,3-Dimethylbutane (CAS 79-29-8)

US. Rhode Island RTK

1,1-Difluoroethane (CAS 75-37-6)
Acetone (CAS 67-64-1)
Cyclohexane (CAS 110-82-7) Dimethyl Ether (CAS 115-10-6) Propane (CAS 74-98-6)
1,1-Difluoroethane (CAS 75-37-6)
Acetone (CAS 67-64-1)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethyl Benzene (CAS 100-41-4) Listed: June 11, 2004

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16: Other Information

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



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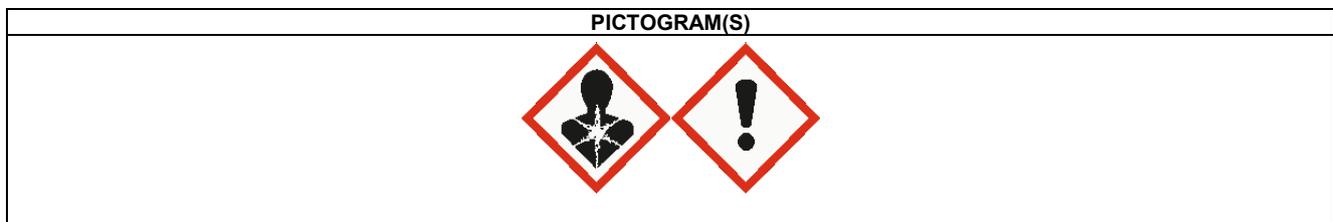
1. IDENTIFICATION

Product name: Loctite® PL® Premium Polyurethane Construction Adhesive **IDH number:** 1390595
Product type/Recommended use: 1-component-polyurethane adhesive **Item number:** 1390595
Restriction of Use: None identified **Region:** United States
Company address: **Contact information:**
 Henkel Corporation Telephone: +1 (860) 571-5100
 One Henkel Way MEDICAL EMERGENCY Phone: Poison Control Center
 Rocky Hill, Connecticut 06067 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	H315 - CAUSES SKIN IRRITATION. H317 - MAY CAUSE AN ALLERGIC SKIN REACTION. H319 - CAUSES SERIOUS EYE IRRITATION. H334 - MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. H335 - MAY CAUSE RESPIRATORY IRRITATION. H372 - CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1



Precautionary Statements

- Prevention:** P260 - Do not breathe dust.
 P264 - Wash affected area thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P271 - Use only outdoors or in a well-ventilated area.
 P272 - Contaminated work clothing should not be allowed out of the workplace.
 P280 - Wear protective gloves, eye protection, and face protection.
 P284 - [In case of inadequate ventilation] wear respiratory protection.
- Response:** P302+P352 - IF ON SKIN: Wash with plenty of water.
 P304+P340+P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Storage: P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical attention.
P337+P313 - If eye irritation persists: Get medical attention.
P342+P311 - If experiencing respiratory symptoms: Call a poison center or physician.
Disposal: P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Other hazards Not available.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Weight %*
Talc	14807-96-6	30 - 60
Methylenebis(phenylisocyanate)	101-68-8	10 - 30
Methylene bisphenyl isocyanate	26447-40-5	1 - 5
Hydrocarbon C11-25 dearomatized	64742-46-7	1 - 5
Polymeric diphenylmethane diisocyanate	9016-87-9	1 - 5

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

First Aid Measures by likely routes of exposure

Inhalation: If inhaled, immediately remove the affected person to fresh air. Immediate medical treatment necessary.

Skin contact: Wash affected area immediately with soap and water. If symptoms develop and persist, get medical attention. Remove contaminated clothes.

Eye contact: In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Ingestion: Do not induce vomiting. Rinse the mouth. Drink plenty of water. Immediate medical advice necessary.

Most important symptoms and effects (acute and delayed): The most important known symptoms and effects, both acute and delayed, are described in Section 11: Toxicological Information.

Indication of any immediate medical attention / special treatment needed: An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate. Treatment based on judgement of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water fog. Foam Carbon dioxide.

Improper extinguishing agents: Not available.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: None known.

Hazardous combustion products:

Nitrous gases Irritating fumes. Isocyanate vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:

Do not empty into drains / surface water / ground water.

Clean-up methods:

Ensure adequate ventilation. Scrape up spilled material and place in a closed container for disposal. Wear suitable protective clothing, gloves and eye/face protection.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid extreme temperatures. Exposure to vapors of heated MDI can be extremely dangerous. Wash thoroughly after handling. Protect from moisture. Use only with adequate ventilation.

Storage:

For safe storage, store between 15 °C (59°F) and 30 °C (86°F) Avoid moisture. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

Shelf Life Statement: Not available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Talc	2 mg/m3 TWA Respirable fraction.	0.1 mg/m3 TWA Respirable 20 MPPCF TWA 2.4 MPPCF TWA Respirable	None	50 ppm
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Methylene bisphenyl isocyanate	0.005 ppm TWA 0.005 ppm TWA	None	None	None
Hydrocarbon C11-25 dearomatized	5 mg/m3 TWA Inhalable fraction.	5 mg/m3 PEL Mist.	None	None
Polymeric diphenylmethane diisocyanate	0.005 ppm TWA	None	None	None

Engineering controls:

Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection:

Observe OSHA regulations for respirator use (29 CFR 1910.134). Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists. Respirator with combination filter for vapor/particulate. However, due to the poor warning properties of MDI, proper fit and timely replacement of filter elements must be ensured.

Eye/face protection:

Safety glasses with side-shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection:

Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Highly viscous, Solid

Color:

Tan

Odor:

Mild

Odor threshold:

Not available.

pH:

Neutral, Weakly, Alkaline

Vapor pressure:

Not available.

Boiling point/range:

172 - 341 °C (341.6 - 645.8 °F)no method / method unknown

Melting point/ range:

Not applicable

IDH number: 1390595

Product name: Loctite® PL® Premium Polyurethane Construction Adhesive
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Density/Relative density:	1.294 - 1.378
Relative vapor density:	Heavier than air
Flash point:	> 93.34 °C (> 200.01 °F)
Flammable/Explosive limits - lower:	1.6 %
Flammable/Explosive limits - upper:	10.2 %
Autoignition temperature:	No information available.
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility:	Slightly soluble Water
Partition coefficient n-octanol/water (logarithmic value):	Not available.
VOC content:	< 3 %; 76 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Dynamic viscosity:	Not available.
Kinematic viscosity:	Not available.
Particle characteristics:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Contact with moisture, other materials that react with isocyanates, or temperatures above 350° F (177° C), may cause polymerization.
Hazardous decomposition products:	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. nitrogen oxides Aromatic isocyanates. carbon oxides.
Incompatible materials:	Oxidizing agents. Alcohols. Water.
Reactivity:	Not available.
Conditions to avoid:	Avoid moisture. Keep away from open flames, hot surfaces and sources of ignition. Prolonged exposure to heat.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure:	Skin, Inhalation, Eyes, Ingestion
Likely routes of exposure:	Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. Dryness of nasal passages, sore throat, cough, tightness of chest, shortness of breath. Persons suffering from allergic reactions to isocyanates should avoid contact with the product. This product may cause sensitization by inhalation and skin contact. May cause respiratory tract irritation.
Inhalation:	This product may cause sensitization by inhalation and skin contact. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. May cause allergic respiratory reaction. Causes respiratory tract irritation. May cause respiratory tract irritation.
Skin contact:	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals. This product may discolor the skin.
Skin contact:	May cause allergic skin reaction. Causes skin irritation.
Eye contact:	Contact with eyes will cause irritation.
Eye contact:	Causes serious eye irritation.
Ingestion:	Ingestion of this product may cause nausea, vomiting and diarrhea.
Ingestion:	Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s
Talc	None
Methylenebis(phenylisocyanate)	None
Methylene bisphenyl isocyanate	None
Hydrocarbon C11-25 dearomatized	Inhalation LC50 (Rat, 4 h) = 1.72 mg/l
Polymeric diphenylmethane diisocyanate	None

Hazardous Component(s)	Immediate Health Effects	Delayed Health Effects	Chronic Health Effects
Talc	Irritant		Lung Some evidence of carcinogenicity
Methylenebis(phenylisocyanate)	Irritant	Allergen	Respiratory
Methylene bisphenyl isocyanate	Irritant	Allergen	Mutagen Respiratory
Hydrocarbon C11-25 dearomatized	Irritant		
Polymeric diphenylmethane diisocyanate	Irritant	Allergen	Kidney Liver Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Talc	No	Group 2A	No
Methylenebis(phenylisocyanate)	No	No	No
Methylene bisphenyl isocyanate	No	No	No
Hydrocarbon C11-25 dearomatized	No	No	No
Polymeric diphenylmethane diisocyanate	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Please refer to the GHS classification in Section 2

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Methylenebis(phenylisocyanate) (CAS# 101-68-8). Polymeric diphenylmethane diisocyanate (CAS# 9016-87-9).

CERCLA Reportable quantity: Methylenebis(phenylisocyanate) (CAS# 101-68-8) 5,000 lbs. (2,270 kg)

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 3, 13, 15

Prepared by: Product Safety and Regulatory Affairs

Issue date: 10/16/2025

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Safety Data Sheet



Revision Number: 007.1

Issue date: 05/12/2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: OSI® QB-300 Multi-Purpose Construction Adhesive
IDH number: 827628
Product type/use: Solvent based adhesive
Restriction of Use: None identified
Region: United States
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067
Contact information:
Telephone: +1 (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkeln.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION.
CAUSES SERIOUS EYE IRRITATION.
SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
REPRODUCTIVE TOXICITY	2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or fumes. Wash affected area thoroughly after handling. Wear protective gloves, clothing, eye and face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Limestone	1317-65-3	40 - 50

IDH number: 827628

Product name: OSI® QB-300 Multi-Purpose Construction Adhesive

Hydrocarbons, C6, isoalkanes, < 5% n-hexane	64742-49-0	20 - 30
Rosin ester	Proprietary	10 - 20
Kaolin	1332-58-7	5 - 10
Titanium dioxide	13463-67-7	0.1 - 1
Quartz (SiO ₂), <1% respirable	14808-60-7	0.1 - 1
Naphthalene	91-20-3	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If symptoms persist, seek medical advice. If breathing is difficult, give oxygen.
Skin contact:	Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If skin irritation persists, call a physician.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Do not induce vomiting, seek medical advice immediately.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide. In case of fire, keep containers cool with water spray.
Special firefighting procedures:	Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode. Wear full protective clothing.
Unusual fire or explosion hazards:	Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors are heavier than air and may travel along floor to an ignition source.
Hazardous combustion products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Ventilate area. Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:

During use and until all vapors are gone: Keep area ventilated - do not smoke; extinguish all flames, pilot lights, and heaters; turn off stoves, electrical tools and appliances, and any other sources of ignition. Do not cut, grind, weld, or drill on or near this container. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Refer to Section 8. Keep out of the reach of children. Containers should be grounded and bonded to the receiving container.

Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Limestone	10 mg/m ³ TWA Inhalable particles. 3 mg/m ³ TWA Respirable particles. 10 mg/m ³ TWA Total dust.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust. 5 mg/m ³ TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 mg/m ³ TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	None	100 ppm (400 mg/m ³) PEL	None	None
Rosin ester	None	None	None	None
Kaolin	2 mg/m ³ TWA Respirable fraction.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust.	None	None
Titanium dioxide	10 mg/m ³ TWA	15 mg/m ³ PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m ³ TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m ³ TWA Respirable fraction.	None	None
Quartz (SiO ₂), <1% respirable	0.025 mg/m ³ TWA Respirable fraction.	0.05 mg/m ³ TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m ³ OSHA_ACT (Respirable dust.) 0.05 mg/m ³ PEL Respirable dust. 2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable.	None	None
Naphthalene	10 ppm TWA (SKIN)	10 ppm (50 mg/m ³) PEL	None	None

Engineering controls:

Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection:

Use a NIOSH approved supplied air respirator with an organic cartridge if the potential to exceed established exposure limits exists.

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Beige
Odor:	Slightly, mineral-oil-like
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	155 mm hg (20 °C (68°F))
Boiling point/range:	57 - 74 °C (134.6 - 165.2 °F)no method
Melting point/ range:	Not available.
Specific gravity:	1.369
Vapor density:	Heavier than air.
Flash point:	-17.80 °C (0.04 °F) no method
Flammable/Explosive limits - lower:	1 %
Flammable/Explosive limits - upper:	7 %
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	4.4 Greater than butyl acetate., (Butyl acetate = 1)
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	20 %; 280 g/l (calculated)
Viscosity:	280,000 - 400,000 mPa.s
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Carbon dioxide, carbon monoxide and irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.
Incompatible materials:	Strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Inhalation, Skin contact, Eye contact
-------------------------------------	---------------------------------------

Potential Health Effects/Symptoms

Inhalation:	Irritates the nose, throat and respiratory system. Exposure to high doses may cause central nervous system depression. Such doses may also cause adverse effects in the liver, kidneys, and lungs. Abrasion of cured material such as by sanding or grinding could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of this product causes no such release. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Skin contact:	Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.
Eye contact:	Contact with eyes can cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Ingestion:	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Limestone	None	Nuisance dust
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	Inhalation LC50 (Rat, 4 h) = > 5,610 mg/m3 Inhalation LC50 (Rat, 4 h) = > 7,630 mg/m3	No Data
Rosin ester	None	Irritant
Kaolin	Oral LD50 (Rat) = > 5,000 mg/kg Dermal LD50 (Rat) = > 5,000 mg/kg	Nuisance dust
Titanium dioxide	Inhalation LC50 (Rat, 4 h) = > 6.82 mg/l Inhalation LC50 (Rat, 4 h) = > 2.28 mg/l Inhalation LC50 (Rat, 4 h) = > 3.56 mg/l	Irritant, Respiratory, Some evidence of carcinogenicity
Quartz (SiO2), <1% respirable	None	Immune system, Lung, Some evidence of carcinogenicity
Naphthalene	Oral LD50 (Rat) = 490 mg/kg Oral LD50 (Rat) = 2.6 g/kg Oral LD50 (Rat) = 2,200 mg/kg Oral LD50 (Rat) = 2,400 mg/kg Dermal LD50 (Rat) = > 20 g/kg Dermal LD50 (Rabbit) = > 2.0 g/kg Inhalation LC50 (Rat, 4 h) = > 0.4 mg/l Inhalation LC50 (Rat, 4 h) = > 78 ppm	Blood, Central nervous system, Eyes, Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Limestone	No	No	No
Hydrocarbons, C6, isoalkanes, < 5% n-hexane	No	No	No
Rosin ester	No	No	No
Kaolin	No	No	No
Titanium dioxide	No	Group 2B	No
Quartz (SiO2), <1% respirable	Known To Be Human Carcinogen.	Group 1	Yes
Naphthalene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Adhesives
Hazard class or division:	3
Identification number:	UN 1133
Packing group:	II

International Air Transportation (ICAO/IATA)
Proper shipping name: Adhesives
Hazard class or division: 3
Identification number: UN 1133
Packing group: II

Water Transportation (IMO/IMDG)
Proper shipping name: ADHESIVES
Hazard class or division: 3
Identification number: UN 1133
Packing group: II

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). n-Hexane (CAS# 110-54-3).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 15

Prepared by: Product Safety and Regulatory Affairs

Issue date: 05/12/2022

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Safety Data Sheet



Revision Number: 003.1

Issue date: 03/22/2024

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: OSI F38 Drywall & Panel Adhesive **IDH number:** 1498717
Product type/use: Adhesive
Restriction of Use: None identified **Region:** United States
Company address: **Contact information:**
Henkel Corporation Telephone: +1 (860) 571-5100
One Henkel Way MEDICAL EMERGENCY Phone: Poison Control Center
Rocky Hill, Connecticut 06067 1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
EYE IRRITATION	2A
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

Prevention: Do not breathe dust or fumes. Wash affected area thoroughly after handling. Wear eye and face protection.
Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if you feel unwell. If eye irritation persists: Get medical attention.
Storage: Not prescribed
Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Limestone	1317-65-3	30 - 40
Kaolin	1332-58-7	1 - 5
Ethylene glycol	107-21-1	1 - 5
Quartz (SiO ₂), <1% respirable	14808-60-7	0.1 - 1
Quartz (SiO ₂) respirable particulates (RCS) >=10%	14808-60-7	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

IDH number: 1498717

4. FIRST AID MEASURES

Inhalation:	If inhaled, immediately remove the affected person to fresh air. Get immediate medical attention.
Skin contact:	Wash affected area immediately with soap and water.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, get medical attention.
Ingestion:	Consult a physician if necessary.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Use water spray to keep fire exposed containers cool and disperse vapors.
Unusual fire or explosion hazards:	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not allow product to enter sewer or waterways.
Clean-up methods:	Scrape up spilled material and place in a closed container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:	Avoid prolonged or repeated skin contact with this material. Keep out of the reach of children.
Storage:	For safe storage, store at or above 0 °C (32°F) Keep from freezing. Store in a cool, dry area. Keep containers closed when not in use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Limestone	10 mg/m ³ TWA Inhalable particles. 3 mg/m ³ TWA Respirable particles. 10 mg/m ³ TWA Total dust.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust. 5 mg/m ³ TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 mg/m ³ TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
Kaolin	2 mg/m ³ TWA Respirable fraction.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust.	None	None
Ethylene glycol	25 ppm TWA Vapor fraction 50 ppm STEL Vapor fraction 10 mg/m ³ STEL Aerosol, inhalable.	None	None	None
Quartz (SiO ₂), <1% respirable	0.025 mg/m ³ TWA Respirable fraction.	0.05 mg/m ³ TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m ³ OSHA_ACT (Respirable dust.) 0.05 mg/m ³ PEL Respirable dust. 2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable.	None	None
Quartz (SiO ₂) respirable particulates (RCS) >=10%	0.025 mg/m ³ TWA Respirable fraction.	0.05 mg/m ³ TWA (Respirable dust.) (Respirable dust.) 0.025 mg/m ³ OSHA_ACT (Respirable dust.) 0.05 mg/m ³ PEL Respirable dust. 2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable.	None	None

Engineering controls:

Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Color:	Tan
Odor:	Acrylic
Odor threshold:	Not available.
pH:	7.2 - 9.0
Vapor pressure:	15 mm hg (20.0 °C (68°F))
Boiling point/range:	100 °C (212°F)
Melting point/ range:	Not available.
Specific gravity:	1.366 - 1.4259 at 25 °C (77°F)
Vapor density:	Heavier than air
Flash point:	> 100 °C (> 212°F) no method / method unknown
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	< 0.6 (Butyl acetate = 1)
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	0.1 %; 49 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Viscosity:	192.00 - 288.00 cp
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen.
Incompatible materials:	This product may react with oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Heat. Do not freeze.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin, Inhalation, Eyes, Ingestion
-------------------------------------	-----------------------------------

Potential Health Effects/Symptoms

Inhalation: May cause nose, throat and lung irritation. Abrasion of cured material such as by sanding or grinding could release respirable particles of silica quartz, a cancer hazard by inhalation. Normal use of this product causes no such release.

Skin contact: May cause skin irritation.

Eye contact: Causes serious eye irritation.

Ingestion: May be harmful if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Limestone	None	Nuisance dust
Kaolin	Oral LD50 (Rat) = > 5,000 mg/kg Dermal LD50 (Rat) = > 5,000 mg/kg	Nuisance dust
Ethylene glycol	Oral LD50 (Rat) = 5.89 g/kg Oral LD50 (Mouse) = 14.6 g/kg Dermal LD50 (Rabbit) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic
Quartz (SiO ₂), <1% respirable	None	Immune system, Lung, Some evidence of carcinogenicity
Quartz (SiO ₂) respirable particulates (RCS) >=10%	None	No Data

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Limestone	No	No	No
Kaolin	No	No	No
Ethylene glycol	No	No	No
Quartz (SiO ₂), <1% respirable	Known To Be Human Carcinogen.	Group 1	Yes
Quartz (SiO ₂) respirable particulates (RCS) >=10%	Known To Be Human Carcinogen.	Group 1	Yes

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimisNone above reporting de minimis
CERCLA/SARA Section 302 EHS:	None above reporting de minimis.
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA Section 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Ethylene glycol (CAS# 107-21-1).
California Proposition 65:	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: Reviewed SDS. Reissued with new date.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 03/22/2024

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Franklin International

Safety Data Sheet

Titebond Contractor Grade Solvent Free Drywall Adhesive

Section 1. Identification

GHS product identifier	: Titebond Contractor Grade Solvent Free Drywall Adhesive
Physical state	: Liquid.
Address	: Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	: Franklin Technical Services
Telephone	: (800) 877-4583
In case of emergency	: Franklin Security (614) 445-1300
e-mail address of person responsible for this SDS	: SDS@FranklinInternational.com
Reference number	: 3620
Product code	: 7292
Date of revision	: 12/9/2025
Safety Data Sheets are available online at	: www.FranklinInternational.com
Chemtrec (24 Hour)	: (800) 424 - 9300
Chemtrec International	: +1 703-741-5970
Chemical family	: Adhesive.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Adhesive.

Uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.

Section 2. Hazards identification

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if needed.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if needed.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : This product may irritate eyes upon contact.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 4.4444°C (40°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Paste.]

Color : Beige.

Odor : Not available.

Odor threshold : Not available.

pH : 7

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : 100°C (212°F)

Section 9. Physical and chemical properties

Flash point	: Closed cup: >93.333°C (>200°F) [Setaflash] [Product does not sustain combustion.]
Evaporation rate	: <1 (butyl acetate = 1)
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.
VOC (less water, less exempt solvents)	: 7.5 g/l
Vapor pressure	:

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Water	17.5	2.3				

Relative vapor density	: Not available.
Relative density	: 1.44
Solubility in water	: Not available.
Miscible with water	: Yes.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Serious eye damage/eye irritation

Not available.

Conclusion/Summary [Product] : This product may irritate eyes upon contact.

Section 11. Toxicological information

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Inhalation, Eyes.

Routes of entry not anticipated: Dermal.

Potential acute health effects

Eye contact : This product may irritate eyes upon contact.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Section 11. Toxicological information

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

Section 15. Regulatory information

U.S. Federal regulations

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

 **WARNING:** This product can expose you to vinyl acetate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Vinyl acetate	-	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Section 15. Regulatory information

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

China : Not determined.

United States TSCA 8(b) inventory : All components are active or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of printing : 12/9/2025

Date of issue/Date of revision : 12/9/2025

Date of previous issue : 3/25/2025

Version : 2.2

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Franklin International

Safety Data Sheet

Titebond FRP Adhesive

Section 1. Identification

GHS product identifier : Titebond FRP Adhesive
Physical state : Liquid.
Address : Franklin International
2020 Bruck Street
Columbus OH 43207
Contact person : Franklin Technical Services
Telephone : (800) 877-4583
In case of emergency : Franklin Security
(614) 445-1300
e-mail address of person responsible for this SDS : SDS@FranklinInternational.com
Reference number : 3432
Product code : 4054
Date of revision : 12/9/2025
Safety Data Sheets are available online at : www.FranklinInternational.com
Chemtrec (24 Hour) : (800) 424 - 9300
Chemtrec International : +1 703-741-5970

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Adhesive.

Uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Section 2. Hazards identification

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if needed.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if needed.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : This product may irritate eyes upon contact.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid. [Paste.]
Color	: Brown. [Light]
Odor	: Characteristic. [Slight]
Odor threshold	: Not available.
pH	: 5
Melting point/freezing point	: Not available.
Boiling point or initial boiling point and boiling range	: 100°C (212°F)

Section 9. Physical and chemical properties

- Flash point** : Closed cup: >93.3°C (>199.9°F) [Setaflash] [Product does not sustain combustion.]
- Evaporation rate** : <1 (butyl acetate = 1)
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- VOC (less water, less exempt solvents)** : 27.04 g/l
- Vapor pressure** :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Water	17.5	2.3				

- Relative vapor density** : Not available.
- Relative density** : 1.3852
- Solubility(ies)** :

Media	Result
cold water	Soluble
hot water	Soluble

- Solubility in water** : Not available.
- Miscible with water** : Yes.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Section 11. Toxicological information

Serious eye damage/eye irritation

Not available.

Conclusion/Summary [Product] : This product may irritate eyes upon contact.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : This product may irritate eyes upon contact.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

Section 15. Regulatory information

U.S. Federal regulations

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

 **WARNING:** This product can expose you to vinyl acetate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
<input checked="" type="checkbox"/> Vinyl acetate	-	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Section 15. Regulatory information

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

China : Not determined.

United States TSCA 8(b) inventory : All components are active or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of printing : 12/9/2025

Date of issue/Date of revision : 12/9/2025

Date of previous issue : 3/25/2025

Version : 3.2

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Franklin International

Safety Data Sheet

Titebond Solvent Based FRP Adhesive

Section 1. Identification

GHS product identifier : Titebond Solvent Based FRP Adhesive

Physical state : Liquid.

Address : Franklin International
2020 Bruck Street
Columbus OH 43207

Contact person : Franklin Technical Services

Telephone : (800) 877-4583

In case of emergency : Franklin Security
(614) 445-1300

e-mail address of person responsible for this SDS : SDS@FranklinInternational.com

Reference number : 3103

Product code : 3227

Date of revision : 3/25/2025

Safety Data Sheets are available online at : www.FranklinInternational.com

Chemtrec (24 Hour) : (800) 424 - 9300

Chemtrec International : +1 703-741-5970

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Not applicable.

Uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2B
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements

Hazard pictograms



Signal word : Danger

Section 2. Hazards identification

- Hazard statements** : Highly flammable liquid and vapor.
Causes skin and eye irritation.
May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child. (inhalation)
May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys, liver) (inhalation)
- Precautionary statements**
- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling.
- Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.
- Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	%	Identifiers
n-hexane	≥10 - ≤25	CAS: 110-54-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Section 4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

Section 4. First aid measures

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.

- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 43.333°C (110°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
n-hexane	<p>NIOSH REL (United States, 10/2020) TWA 10 hours: 50 ppm. TWA 10 hours: 180 mg/m³.</p> <p>CAL OSHA PEL (United States, 5/2018) Absorbed through skin. TWA 8 hours: 180 mg/m³. TWA 8 hours: 50 ppm.</p> <p>OSHA PEL (United States, 5/2018) TWA 8 hours: 500 ppm. TWA 8 hours: 1800 mg/m³.</p> <p>OSHA PEL 1989 (United States, 3/1989) TWA 8 hours: 50 ppm. TWA 8 hours: 180 mg/m³.</p> <p>ACGIH TLV (United States, 1/2024) Absorbed through skin. TWA 8 hours: 50 ppm.</p>

Biological exposure indices

Ingredient name	Exposure indices
n-hexane	<p>ACGIH BEI (United States, 1/2024) BEI: 0.5 mg/l, 2,5-hexanedion [in urine]. Sampling time: end of shift.</p>

Section 8. Exposure controls/personal protection

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid. [Paste.]
- Color** : Beige.
- Odor** : Solvent(s) [Slight]
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.

Section 9. Physical and chemical properties

Boiling point or initial boiling point and boiling range	: 61.667°C (143°F)
Flash point	: Closed cup: -17.7°C (0.14°F) [Setaflash]
Evaporation rate	: Not available.
Flammability	: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Lower and upper explosion limit/flammability limit	: Lower: 1.2% Upper: 7.5%
VOC (less water, less exempt solvents)	: 259 g/l
Vapor pressure	:

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
hexane	127.51036	17				

Relative vapor density	: Not available.
Relative density	: 1.26
Solubility(ies)	:

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	:

Ingredient name	°C	°F	Method
hexane	225	437	

Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name

n-hexane

Result

Rat - Oral - LD50

15840 mg/kg

Rat - Inhalation - LC50 Gas.

48000 ppm [4 hours]

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Serious eye damage/eye irritation

n-hexane

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 10 mg

Conclusion/Summary [Product] : Severely irritating to eyes.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

Titebond Solvent Based FRP Adhesive

n-hexane

Result

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
(Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
(Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Product/ingredient name

Titebond Solvent Based FRP Adhesive

n-hexane

Result

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS), kidneys, liver) (inhalation) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (peripheral nervous system) (inhalation) - Category 1

Aspiration hazard

Product/ingredient name

n-hexane

Result

ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : Causes eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Result

Not available.

Section 11. Toxicological information

Result

Not available.

Conclusion/Summary [Product] : Not available.

General : May cause damage to organs through prolonged or repeated exposure if inhaled. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging fertility or the unborn child. (inhalation)

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
n-hexane	15840	N/A	48000	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

n-hexane

Result

Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*
Age: 31 days; Size: 20.4 mm; Weight: 0.123 g
2500 µg/l [96 hours]
Effect: Mortality

Acute - EC50

Crustaceans
3.9 mg/l [48 hours]

Acute - EC50

Algae
0.89 mg/l [96 hours]

Chronic - NOEC

Fish - rainbow trout
2.8 mg/l [28 days]

Chronic - NOEC

Crustaceans
4.9 mg/l [21 days]

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-hexane	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
n-hexane	4	501.187	High

Mobility in soil

Section 12. Ecological information

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN1133	UN1133	UN1133	UN1133	UN1133	UN1133
UN proper shipping name	ADHESIVES, containing flammable liquid	ADHESIVES, containing flammable liquid	ADHESIVES, containing flammable liquid	ADHESIVES, containing flammable liquid	ADHESIVES, containing flammable liquid	ADHESIVES, containing flammable liquid
Transport hazard class(es)	3  	3 	3 	3 	3  	3 
Packing group	III	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.	No.

Additional information

DOT Classification : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. **Reportable quantity** 25027 lbs / 11362.3 kg [2382.2 gal / 9017.7 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

ADR/RID : **Tunnel code** (D/E)

Section 14. Transport information

- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Section 15. Regulatory information

U.S. Federal regulations

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification

- : FLAMMABLE LIQUIDS - Category 2
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2B
 TOXIC TO REPRODUCTION - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 HNOC - Defatting irritant

Composition/information on ingredients

Name	%	Classification
n-hexane	≥10 - ≤25	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 ASPIRATION HAZARD - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	n-hexane	110-54-3	≥10 - ≤25
Supplier notification	n-hexane	110-54-3	≥10 - ≤25

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: HEXANE; OIL MIST, MINERAL

New York : The following components are listed: Hexane

New Jersey : The following components are listed: n-HEXANE

Pennsylvania : The following components are listed: HEXANE

California Prop. 65

Section 15. Regulatory information

⚠ WARNING: This product can expose you to n-Hexane, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
n-hexane	-	Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

China : All components are listed or exempted.

United States TSCA 8(b) inventory : All components are active or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	Expert judgment
SKIN IRRITATION - Category 2	Expert judgment
EYE IRRITATION - Category 2B	Expert judgment
TOXIC TO REPRODUCTION - Category 2	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Expert judgment

History

Date of printing : 3/25/2025

Date of issue/Date of revision : 3/25/2025

Date of previous issue : 7/30/2024

Version : 2.1

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

Section 16. Other information

✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Goof Off Professional Strength

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Supersedes Revision: 02/18/2020

This SDS complies with the Canadian Hazardous Products Regulations of 2015.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Goof Off Professional Strength

Company Name: W. M. Barr and Company, Inc.
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Web site address: www.wmbarr.com

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346

Information: W.M. Barr Customer Service (800)398-3892

Product Category: General Purpose Adhesive Remover

Intended Use: Multi-Purpose Remover for tar, ink, paint, adhesive, etc.

Product Code: FG612, FG631, FG653, FG654, FG654LWS, FG656AM, FG657, FG661, FG661CAN

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 2

Acute Toxicity: Inhalation, Category 4

Carcinogenicity, Category 2

Skin Irritation, Category 2

Eye Irritation, Category 2

Specific Target Organ Toxicity (single exposure), Category 1

Specific Target Organ Toxicity (repeated exposure), Category 2 - Auditory system.



GHS Signal Word:

Danger

GHS Hazard Phrases:

H225 - Highly flammable liquid and vapor.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H351 - Suspected of causing cancer.

H370 - Causes damage to organs

H373 - May cause damage to - Auditory system. through prolonged or repeated exposure.

GHS Precautionary Phrases:

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe fumes/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated

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clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+311 - If exposed or concerned: Call a POISON CENTER/Doctor/...
P313 - Get medical advice/attention.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P314 - Get medical attention/advice if you feel unwell.
P321 - Specific treatment see label.
P332+313 - If skin irritation occurs, get medical advice/attention.
P337+313 - If eye irritation persists, get medical advice/attention.
P362+364 - Take off contaminated clothing and wash it before reuse.
P370+378 - In case of fire, use dry chemical powder to extinguish.
P403+235 - Store in cool/well-ventilated place.
P405 - Store locked up.
P501 - Dispose of contents/container according to local, state and federal regulations.

GHS Storage and Disposal Phrases:

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

**See above.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	Molecular Formula
67-64-1	Acetone {2-Propanone}	60.0 -80.0 %	C3H6O
1330-20-7	Xylene (mixed isomers) {Benzene, dimethyl-}	7.0 -13.0 %	C6H4(CH3)2
8052-41-3	Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	5.0 -10.0 %	C8H15BrO2
100-41-4	Ethylbenzene {Ethylbenzol; Phenylethane}	1.0 -5.0 %	CH3CH2C6H5
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	1.0 -5.0 %	CH3OH

Additional Chemical Information

Specific percentage of composition is being withheld as a trade secret.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Skin:
IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

Eyes:
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention immediately.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Note to Physician:

Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flammability Classification:	NFPA Class IB
Flash Point:	-17.2 C (1.00 F) Method Used: Setaflash Closed Cup (Rapid Setaflash)
Explosive Limits:	LEL: N.D. UEL: N.D.
Autoignition Pt:	N.D.
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Unsuitable Extinguishing Media:	**None known.
Fire Fighting Instructions:	Wear self contained breathing apparatus for fire fighting if necessary.
Flammable Properties and Hazards:	Vapor may travel considerable distance to source of ignition and flash back.
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:	Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Stay upwind. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use non-sparking tools. Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Dike far ahead of spill for later disposal. Avoid runoff into storm sewers and ditches which lead to waterways.
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7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Do not reuse this container. Read carefully and follow all instructions. Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc. Do not spread this product over large surface areas because fire and health safety risks will increase dramatically.
Precautions To Be Taken in Storing:	Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.
Other Precautions:	Keep away from heat, sparks, and open flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
67-64-1	Acetone {2-Propanone}	ACGIH TLV	TLV: 500 ppm STEL: 750 ppm	
		OSHA PELs	PEL: 1000 ppm	
1330-20-7	Xylene (mixed isomers) {Benzene, dimethyl-}	ACGIH TLV	TLV: 100 ppm STEL: 150 ppm	
		OSHA PELs	PEL: 100 ppm	
8052-41-3	Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	ACGIH TLV	TLV: 100 ppm	
		OSHA PELs	PEL: 500 ppm	
100-41-4	Ethylbenzene {Ethylbenzol; Phenylethane}	ACGIH TLV	TLV: 100 ppm STEL: 125 ppm	
		OSHA PELs	PEL: 100 ppm	
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	ACGIH TLV	TLV: 200 ppm STEL: 250 ppm	
		OSHA PELs	PEL: 200 ppm	

Personal Protective

Equipment Symbols:

Respiratory Equipment (Specify Type):

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye Protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Protective Gloves:

Wear appropriate gloves to prevent skin exposure.

Other Protective Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.):

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.

Work/Hygienic/Maintenance Practices:

Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:

[] Gas [X] Liquid [] Solid

Appearance and Odor:

solvent odor. Odor threshold not determined.

pH:

N.D.

Melting Point:

N.D.

Boiling Point:

37.7 C (99.90 F)

Flash Point:

-17.2 C (1.00 F) Setaflash Closed Cup (Rapid Setaflash)

Evaporation Rate:

> 1

Flammability (solid, gas):

No data available.

Explosive Limits:

LEL: N.D. UEL: N.D.

Vapor Pressure:

N.D.

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Vapor Density (vs. Air=1):	N.D.
Specific Gravity (Water=1):	0.8200 - 0.8248
Density:	6.84 - 6.88 LB/GL
Solubility in Water:	No data.
Solubility Notes:	Partial or Limited Solubility.
Saturated Vapor Concentration:	N.D.
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	100.0 % by weight.
VOC / Volume:	20.0000 % WT
Autoignition Pt:	N.D.
Decomposition Temperature:	N.D.
Viscosity:	< 5 cps
a_fld_hdr[9]:	VOC (g/L): 163.25 g/L max.
	ND = Not Determined.

10. STABILITY AND REACTIVITY

Stability:	Unstable [<input type="checkbox"/>] Stable [<input checked="" type="checkbox"/>]
Conditions To Avoid - Instability:	No data available.
Incompatibility - Materials To Avoid:	Strong oxidizing agents.
Hazardous Decomposition or Byproducts:	Carbon monoxide, Carbon dioxide.
Possibility of Hazardous Reactions:	Will occur [<input type="checkbox"/>] Will not occur [<input checked="" type="checkbox"/>]
Conditions To Avoid - Hazardous Reactions:	**None known.

11. TOXICOLOGICAL INFORMATION

Toxicological Information: This product has not been tested as a whole. Refer to section 2 for health effects.

CAS# 67-64-1:

Standard Draize Test, Eyes, Species: Rabbit, 20.00 MG, Severe.

Result:

Behavioral: Change in motor activity (specific assay).

Behavioral: Alteration of classical conditioning.

- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave., Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

CAS# 1330-20-7:

Acute toxicity, LC50, Inhalation, Rat, 5000. PPM, 4 H.

Result:

Behavioral: Muscle contraction or spasticity.

Lungs, Thorax, or Respiration: Other changes.

- Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Labor, Lehigh Univ., Bethlehem, PA 18015, Vol/p/yr: 1,123, 1974

Standard Draize Test, Eyes, Species: Rabbit, 5.000 MG, 24 H, Severe.

Result:

Behavioral: General anesthetic.

Behavioral: Somnolence (general depressed activity).

Behavioral: Irritability.

- "Sbornik Vysledku Toxilogickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,24, 1972

CAS# 100-41-4:

Tumorigenic Effects:, TCLo, Inhalation, Rat, 750.0 ppm.

Result:

Tumorigenic: Carcinogenic by RTECS criteria.

Kidney, Ureter, Bladder: Tumors.

Standard Draize Test, Eyes, Species: Rabbit, 500.0 MG, Severe.

Result:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave., Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

Carcinogenicity/Other Information:

ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans.

ACGIH A4 - Not Classifiable as a Human Carcinogen.

IARC 2B - Possibly Carcinogenic to Humans.

IARC 3: Not Classifiable as to Carcinogenicity in Humans.

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CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
67-64-1	Acetone {2-Propanone}	n.a.	n.a.	A4	n.a.
1330-20-7	Xylene (mixed isomers) {Benzene, dimethyl-}	n.a.	3	A4	n.a.
8052-41-3	Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	n.a.	n.a.	n.a.	n.a.
100-41-4	Ethylbenzene {Ethylbenzol; Phenylethane}	n.a.	2B	A3	n.a.
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information: This product has not been tested as a whole.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with applicable local, state, and federal regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Paint related material.
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1263 **Packing Group:** II



LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Paint related material.
UN Number: UN1263 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

Additional Transport Information: The shipper / supplier may be able to apply one of the following exceptions if allowed under 49 CFR Regulations: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49 CFR Hazmat Regulations. Please consult 49 CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
67-64-1	Acetone {2-Propanone}	No	Yes NA	No
1330-20-7	Xylene (mixed isomers) {Benzene, dimethyl-}	No	Yes NA	Yes (13%)
8052-41-3	Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	No	No	No
100-41-4	Ethylbenzene {Ethylbenzol; Phenylethane}	No	Yes NA	Yes (5%)
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	No	Yes NA	Yes (5%)

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CAS #	Hazardous Components (Chemical Name)	Canadian NPRI	Canadian Toxic	Canadian DSL
67-64-1	Acetone {2-Propanone}	No	No	Yes
1330-20-7	Xylene (mixed isomers) {Benzene, dimethyl-}	Yes: Part 5		Yes
8052-41-3	Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	Yes: Part 5	No	Yes
100-41-4	Ethylbenzene {Ethylbenzol; Phenylethane}	Yes: Part 1A	No	Yes
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	Yes: Part 5		Yes

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
67-64-1	Acetone {2-Propanone}	TSCA: Inventory
1330-20-7	Xylene (mixed isomers) {Benzene, dimethyl-}	CAA HAP,ODC: HAP: VHAP CWA NPDES TSCA: Inventory
8052-41-3	Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}	TSCA: Inventory
100-41-4	Ethylbenzene {Ethylbenzol; Phenylethane}	CAA HAP,ODC: HAP: VHAP CWA NPDES TSCA: Inventory
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	CA PROP.65: Yes: Canc. CAA HAP,ODC: HAP: VHAP TSCA: Inventory CA PROP.65: Yes: RDTox.

Additional Regulatory Information This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product.

16. OTHER INFORMATION

Revision Date: 09/24/2024 **Previous revision:** 02/18/2020
Preparer Name: W.M. Barr Regulatory Department

Additional Information About This Product: No data available.

Company Policy or Disclaimer:



Safety Data Sheet

1 - Identification

Trade Name: WD-40 MULTI-USE PRODUCT AEROSOL	Manufacturer: WD-40 Company
Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces from Corrosion	Address: 9715 Businesspark Avenue San Diego, California, USA 92131
Restrictions on Use: None identified	Telephone:
SDS Date of Preparation: May 21, 2024	Emergency: 1-888-324-7596
	Information: 1-888-324-7596
	Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)

2 – Hazards Identification

GHS Classification:

Flammable Aerosol Category 1

Aspiration Toxicity Category 1

Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

This product is a consumer product and is labeled in accordance with local regulations for consumer chemicals. The actual container label may not include the label elements below. The labeling below applies to industrial/professional products.

Label Elements:



DANGER!

H222 Extremely Flammable Aerosol.

H229 Pressurized container: may burst if heated.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing vapors or mists.

P271 Use only outdoors or in a well-ventilated area.

Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or physician.

P331 Do NOT induce vomiting.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or physician if you feel unwell.

Storage

P405 Store locked up.

P410+P412+P403 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Disposal

P501 Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	GHS Classification
Aliphatic Hydrocarbon	64742-47-8	50-70%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Petroleum Base Oil	Mixture	<25%	Not Hazardous
Carbon Dioxide	124-38-9	2-3%	Simple Asphyxiant Gas Under Pressure, Compressed Gas

Note: The exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call a physician or poison control center immediately.

Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

Signs and Symptoms of Exposure: Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye and respiratory irritation. Skin contact may cause drying of the skin. Inhalation may cause coughing, headache, and dizziness.

Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Specific Hazards Arising from the Chemical: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate the area.

Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Intentional misuse by deliberately concentrating vapors and inhaling can be harmful or fatal. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces, and open flames. Unplug electrical tools, motors, and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush, or incinerate containers, even when empty.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil (as mineral oil)	5 mg/m ³ TWA Mexico OEL 5 mg/m ³ TWA (inhalable) ACGIH TLV
Carbon Dioxide	5000 ppm TWA, 15000 ppm STEL Mexico OEL 5000 ppm TWA, 30000 ppm STEL ACGIH TLV

The Following Controls are Recommended for Normal Consumer Use of this Product

Appropriate Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Appropriate Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form, and concentration. Follow local regulations and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Appearance:	Light green to amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F (21.1°C)
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F (15.6°C)
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	122°F (49°C) Tag Closed Cup (concentrate)	Autoignition Temperature:	Not established
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Flammable Aerosol	Viscosity:	2.79-2.96 cSt @ 100°F (37.8°C)
VOC:	65%	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions

Chemical Stability: Stable

Possibility of Hazardous Reactions: May react with strong oxidizers generating heat.

Conditions to Avoid: Avoid heat, sparks, flames, and other sources of ignition. Do not puncture or incinerate containers.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness, and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.

Ingestion: Swallowing is an unlikely route of exposure for an aerosol product. This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs, and may cause chemical pneumonitis, severe lung damage and death.

Chronic Effects: None expected.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity:

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg and the dermal toxicity greater than 2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available; however, components of this product are not expected to be harmful to aquatic organisms.

Persistence and Degradability: Components are readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available

Other Adverse Effects: None known

13 - Disposal Considerations

Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty

(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

Canadian Environmental Protection Act: One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

16 – Other Information

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: May 21, 2024

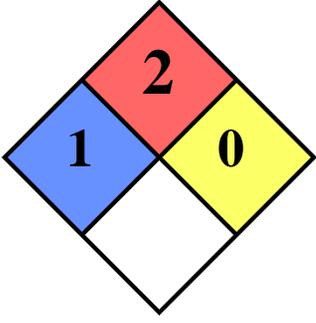
Supersedes: August 3, 2021

Revision Summary: Reviewed and updated SDS.

Prepared by: IHSC, LLC. Milford, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Department



4093100/ No.0069810

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 5/12/2025

Issue date: 5/12/2025 Supersedes: 1/25/2022

Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Name	Hilti Spray
Product code	BU Direct Fastening



1.2. Recommended use and restrictions on use

Recommended use	For professional use only, lubricants
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1.3. Supplier

Supplier

Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
US TX 75024 Plano
USA
T +1 9724035800
1-800-879-8000 toll free, F +1 918 254 0522

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-direct.fastening@hilti.com

1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria for section 3.2 of HCS

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.
First-aid measures after skin contact	If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Wash skin with plenty of water.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Do not induce vomiting. Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects No information available.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures Ventilate area.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. Store away from other materials.

Other information Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep cool. Protect from sunlight. Store in a well-ventilated place.

Incompatible materials Sources of ignition. Direct sunlight. Moisture.

Storage temperature 5 – 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hilti Spray
No additional information available

8.2. Appropriate engineering controls

Environmental exposure controls Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Not required for normal conditions of use.

Hand protection:				
In case of repeated or prolonged contact wear gloves. Nitrile rubber gloves				
Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12	
Eye protection:				
Not required. Avoid contact with eyes				

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Yellow
Odour	Mixture contains one or more component(s) which have the following odour: characteristic
Odour threshold	No data available
pH	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	300 °C
Flash point	240 °C
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available
Vapour pressure at 50°C	1 hPa
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	0.93 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	200 °C
Viscosity, kinematic	23.4 mm ² /s (40 °C)
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not applicable	Not applicable	Not regulated	Not regulated
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not regulated	Not regulated
14.4. Packing group			
Not applicable	Not applicable	Not regulated	Not regulated
14.5. Environmental hazards			
Not applicable	Not applicable	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

DOT

Not applicable

TDG

Not applicable

IMDG

Not regulated

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Hilti Spray

Safety Data Sheet

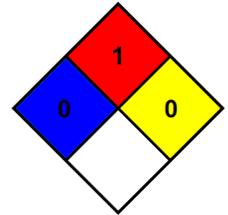
according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date 05/12/2025
Data sources European Chemicals Agency, <http://echa.europa.eu/>.
Other information A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis.

NFPA health hazard 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:			
General.			
Section	Changed item	Change	Comments
1	Emergency number	Modified	
1	Department issuing data specification sheet:	Modified	
8.2	Personal protection	Added	

SDS US HILTI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

HILTI POWDER AND LUBRICANT

- 1. HILTI – DX POWDER TOOL POWDER SHOT**
- 2. HILTI – HILTI LUBRICANT**

DX-Cartridge

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 11/27/2023

Issue date: 11/27/2023

Supersedes: 8/4/2022 Version: 3.2

SECTION 1: Identification

1.1. Identification

Product form	Article
Name	DX-Cartridge
Product code	BU Direct Fastening

1.2. Recommended use and restrictions on use

Recommended use	CARTRIDGES FOR TOOLS, BLANK
Restrictions on use	For professional use only

1.3. Supplier

Supplier

Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
Plano, TX 75024
USA
T +1 9724035800
1-800-879-8000 toll free - F +1 918 254 0522

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
Schaan, 9494
Liechtenstein
T +423 234 2111
df-hse@hilti.com

1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Explosives, Division 1.4 H204 Fire or projection hazard.
Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US)

Hazard statements (GHS US)

Precautionary statements (GHS US)

Warning

H204 - Fire or projection hazard.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P250 - Do not subject to shock, friction, grinding.

P280 - Wear eye protection.

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P370+P380+P375 - In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

P372 - Explosion risk in case of fire.

P401 - Store in accordance with local regulations on explosives.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification

This article contains hazardous substances or preparations not intended to be released under normal or reasonably foreseeable conditions of use. The dismantling of the article is prohibited!. Keep away from ignition sources (including static discharges).

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

max. net explosives weight each cartridge in mg:

Caliber 6.8/11 (cal .27 short) white: 130; brown: 140; green: 160; yellow: 180; red: 230; titanium: 230; black: 260

Caliber 6.8/18 (cal .27 long) green: 190; yellow: 220; blue: 300; red: 330; black: 410

Caliber 6.3/10 (cal. 25) green 120; yellow: 190; red: 230; black: 250

Caliber 5.5/16 (cal .22) grey: 105; brown: 120; green: 175; yellow: 210; red: 270

Within the cartridges the explosive ingredients (gun powder and priming composition) are hermetically separated from the environment. They will be only opened with effort and under destruction of the article.

Propellant powder: glycerol trinitrate containing nitrocellulose powder

Mass per cartridge: essentially dependent on the required power (100-400 mg)

Exposed propellant powder outside a cartridge is harmful if swallowed and highly flammable; without tamping no explosion risk.

Packed safety cartridges don't represent a significant risk.

In case of reaction no dangerous fragments or projectiles will be formed.

Mechanical or thermal attempts to expose the primer composition lead to an immediate reaction of the dangerous ingredients.

Name	Product identifier	%	GHS-US classification
Iron	CAS-No.: 7439-89-6	50 – 70	Not classified
Plastics (PP / PA / PC)	-	15 – 40	Not classified
cellulose nitrate	CAS-No.: 9004-70-0	5 – 21	Expl. 1.1, H201
glycerol trinitrate	CAS-No.: 55-63-0	2 – 10	Unst. Expl., H200 Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373

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Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Explosion hazard Explosion risk in case of fire.
Hazardous decomposition products in case of fire Carbon monoxide. Carbon dioxide (CO₂). Nitrous gasses.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Equip cleanup crew with proper protection.
Emergency procedures Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Pick up loose cartridges only by hand.
Exposed ingredients must be swept up carefully and phlegmatized in a water container, labelled according the regulations, wipe down with water the contaminated area. Store away from other materials.
Other information Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed Hazardous waste due to potential risk of explosion.
Precautions for safe handling Do not subject to grinding, shock, friction. Take precautionary measures against static discharge.
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Ground/bond container and receiving equipment.
Storage conditions Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Store in a dry place.
Incompatible products Strong bases. Strong acids.
Storage temperature 5 – 25 °C
Information on mixed storage Keep away from : Ignition sources. Do not store with: Store according to local legislation.

DX-Cartridge

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Storage area

Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DX-Cartridge	
No additional information available	
cellulose nitrate (9004-70-0)	
No additional information available	
glycerol trinitrate (55-63-0)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Nitroglycerin (NG)
ACGIH OEL TWA [ppm]	0.05 ppm
Remark (ACGIH)	Vasodilation
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Nitroglycerin
OSHA PEL C	2 mg/m ³
OSHA PEL C [ppm]	0.2 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
lead styphnate (15245-44-0)	
No additional information available	
barium nitrate (10022-31-8)	
No additional information available	
copper (7440-50-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Copper, as Cu
ACGIH OEL TWA	0.2 mg/m ³ (Fume) 1 mg/m ³ (Dusts and mists)
Remark (ACGIH)	TLV® Basis: Irr; GI; metal fume fever
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Copper
OSHA PEL TWA [1]	0.1 mg/m ³ (Fume (as Cu)) 1 mg/m ³ (Dusts and mists (as Cu))
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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zinc (7440-66-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m ³
diphenylamine (122-39-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Diphenylamine
ACGIH OEL TWA	10 mg/m ³
Remark (ACGIH)	Liver & kidney dam; hematologic eff
Regulatory reference	ACGIH 2023
tetrazene (109-27-3)	
No additional information available	
Iron (7439-89-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m ³ as iron oxide dust or fume
Plastics (PP / PA / PC)	
No additional information available	

8.2. Appropriate engineering controls

Appropriate engineering controls	No additional information available.
Environmental exposure controls	Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

When using cartridge operated tools, sufficient ear protection must be worn.

Hand protection:
Not required for normal conditions of use
Eye protection:
Chemical goggles or safety glasses. ISO 16321-1
Skin and body protection:
When using cartridge operated tools, sufficient ear protection must be worn.
Respiratory protection:
Respiratory protection not required in normal conditions

Personal protective equipment symbol(s):



DX-Cartridge

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Thermal hazard protection:

No information available.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Colour	According to product specification
Odour	There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure.
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	Not applicable
Boiling point	No data available
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Viscosity, kinematic	Not applicable
Viscosity, dynamic	No data available
Explosive limits	Not applicable
Explosive properties	Fire or projection hazard.
Oxidising properties	No data available

9.2. Other information

Additional information	Not applicable Article
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SECTION 10: Stability and reactivity

10.1. Reactivity

Fire or projection hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Risk of explosion by shock, friction, fire or other sources of ignition. Heating may cause an explosion. At high temperatures : > 150 °C Response.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

DX-Cartridge

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Nitrogen oxides. Metal oxides. Thermal decomposition can lead to the release of irritating gases and vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)

glycerol trinitrate (55-63-0)	
LD50 oral	685 mg/kg
LD50 dermal rat	> 9560 mg/kg bodyweight (OECD 402 method)
ATE US (dust,mist)	0.05 mg/l/4h

lead styphnate (15245-44-0)	
LD50 oral rat	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	> 5.05 mg/l/4h (OECD 403 method)

barium nitrate (10022-31-8)	
LD50 oral	355 mg/kg
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

diphenylamine (122-39-4)	
LD50 oral rat	> 800 mg/kg bodyweight
LD50 dermal	5000 mg/kg
ATE US (gases)	700 ppmv/4h
ATE US (vapours)	3 mg/l/4h
ATE US (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)

diphenylamine (122-39-4)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)

DX-Cartridge

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

glycerol trinitrate (55-63-0)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
lead styphnate (15245-44-0)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
diphenylamine (122-39-4)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic	Not applicable
Potential adverse human health effects and symptoms	No additional information available. No harmful effects are to be expected if used properly. The contained ingredients can be harmful, but they are hermetically enclosed in the article and can not be released. The dismantling of the article is prohibited.
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	No harmful effects are to be expected if used properly. The contained ingredients can be harmful, but they are hermetically enclosed in the article and can not be released. The dismantling of the article is prohibited.
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12.2. Persistence and degradability

DX-Cartridge	
Persistence and degradability	Not established.
glycerol trinitrate (55-63-0)	
Not rapidly degradable	
Persistence and degradability	Inherently biodegradable.
Biodegradation	92.2 % (84 h)
lead styphnate (15245-44-0)	
Not rapidly degradable	
barium nitrate (10022-31-8)	
Not rapidly degradable	
copper (7440-50-8)	
Not rapidly degradable	
zinc (7440-66-6)	
Not rapidly degradable	
Persistence and degradability	Not applicable for inorganic products.

DX-Cartridge

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

diphenylamine (122-39-4)	
Not rapidly degradable	
Persistence and degradability	Not readily biodegraded.
Biodegradation	26 % (28 d; (OECD 301D method))
tetrazene (109-27-3)	
Not rapidly degradable	
Iron (7439-89-6)	
Not rapidly degradable	

12.3. Bioaccumulative potential

DX-Cartridge	
Bioaccumulative potential	Not established.
glycerol trinitrate (55-63-0)	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
lead styphnate (15245-44-0)	
BCF - Fish [1]	1.553
Partition coefficient n-octanol/water (Log Kow)	-2.19 (20 °C)
zinc (7440-66-6)	
Bioaccumulative potential	Bioaccumulation unlikely.
diphenylamine (122-39-4)	
Partition coefficient n-octanol/water (Log Kow)	3.82 (20,2 °C)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

12.4. Mobility in soil

glycerol trinitrate (55-63-0)	
Ecology - soil	Low potential for adsorption in soil.
diphenylamine (122-39-4)	
Surface tension	72.3 mN/m (20 °C; EU Method A.5)

12.5. Other adverse effects

Other adverse effects	No additional information available.
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
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DX-Cartridge

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Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Refer to manufacturer/supplier for information on recovery/recycling. At high temperatures may form : Response.
Additional information	Unused cartridges: Hazardous waste due to risk of explosion. European waste catalogue: 16 04 01* - waste ammunition. If possible use up the cartridges or store them for your next project. If cartridges are used up: European waste catalogue: 20 03 01 - mixed municipal waste . The product can be disposed of as household or factory waste.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 0323	UN 0323	UN 0323	UN 0323
14.2. UN proper shipping name			
CARTRIDGES, POWER DEVICE	CARTRIDGES, POWER DEVICE	Cartridges, power device	CARTRIDGES, POWER DEVICE
Transport document description			
UN 0323 CARTRIDGES, POWER DEVICE, 1.4S, (E)	UN 0323 CARTRIDGES, POWER DEVICE, 1.4S	UN 0323 Cartridges, power device, 1.4S	UN 0323 CARTRIDGES, POWER DEVICE, 1.4S
14.3. Transport hazard class(es)			
1.4S	1.4S	1.4S	1.4S
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	1.4S
Special provisions (ADR)	347
Limited quantities (ADR)	0
Excepted quantities (ADR)	E0
Packing instructions (ADR)	P134, LP102
Mixed packing provisions (ADR)	MP23
Transport category (ADR)	4
Special provisions for carriage - Loading, unloading and handling (ADR)	CV1, CV2, CV3
Special provisions for carriage - Operation (ADR)	S1

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Tunnel restriction code (ADR)	E
Transport by sea	
Special provisions (IMDG)	347
Limited quantities (IMDG)	0
Excepted quantities (IMDG)	E0
Packing instructions (IMDG)	P134, LP102
EmS-No. (Fire)	F-B
EmS-No. (Spillage)	S-X
Stowage category (IMDG)	01
Stowage and handling (IMDG)	SW1
Properties and observations (IMDG)	See glossary of terms in appendix B.
MFAG-No	114

Air transport

PCA Excepted quantities (IATA)	E0
PCA Limited quantities (IATA)	Forbidden
PCA limited quantity max net quantity (IATA)	Forbidden
PCA packing instructions (IATA)	134
PCA max net quantity (IATA)	25kg
CAO packing instructions (IATA)	134
CAO max net quantity (IATA)	100kg
Special provisions (IATA)	A165
ERG code (IATA)	3L

Rail transport

Classification code (RID)	1.4S
Special provisions (RID)	347
Limited quantities (RID)	0
Excepted quantities (RID)	E0
Packing instructions (RID)	P134, LP102
Mixed packing provisions (RID)	MP23
Transport category (RID)	4
Special provisions for carriage – Packages (RID)	W2
Special provisions for carriage - Loading, unloading and handling (RID)	CW1
Colis express (express parcels) (RID)	CE1
Hazard identification number (RID)	1.4S

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Plastics (PP / PA / PC)	CAS-No.	15 – 40%
Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S		
zinc	CAS-No. 7440-66-6	0 – 2%

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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.		
glycerol trinitrate	CAS-No. 55-63-0	2 – 10%
copper	CAS-No. 7440-50-8	0 – 2%
zinc	CAS-No. 7440-66-6	0 – 2%
diphenylamine	CAS-No. 122-39-4	0.1 – 1%

glycerol trinitrate (55-63-0)	
CERCLA RQ	10 lb

copper (7440-50-8)	
CERCLA RQ	5000 lb

zinc (7440-66-6)	
CERCLA RQ	1000 lb

15.2. International regulations

CANADA

cellulose nitrate (9004-70-0)	
Listed on the Canadian DSL (Domestic Substances List)	

glycerol trinitrate (55-63-0)	
Listed on the Canadian DSL (Domestic Substances List)	

lead styphnate (15245-44-0)	
Listed on the Canadian DSL (Domestic Substances List)	

barium nitrate (10022-31-8)	
Listed on the Canadian DSL (Domestic Substances List)	

copper (7440-50-8)	
Listed on the Canadian DSL (Domestic Substances List)	

zinc (7440-66-6)	
Listed on the Canadian DSL (Domestic Substances List)	

diphenylamine (122-39-4)	
Listed on the Canadian DSL (Domestic Substances List)	

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tetrazene (109-27-3)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Iron (7439-89-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

cellulose nitrate (9004-70-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

glycerol trinitrate (55-63-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

lead styphnate (15245-44-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

barium nitrate (10022-31-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

copper (7440-50-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

zinc (7440-66-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

diphenylamine (122-39-4)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Iron (7439-89-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

DX-Cartridge

U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	Yes

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DX-Cartridge	
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	Yes
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Yes

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date

11/27/2023

Data sources

Supplier Safety Data Sheet.

Full text of H-statements	
H200	Unstable explosives.
H201	Explosive; mass explosion hazard.
H204	Fire or projection hazard.
H272	May intensify fire; oxidiser.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H360	May damage fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Abbreviations and acronyms	
CAS-No.	Chemical Abstract Service number
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DX-Cartridge

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Abbreviations and acronyms	
DNEL	Derived-No Effect Level
EC50	Median effective concentration
ED	Endocrine disrupting properties
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
vPvB	Very Persistent and Very Bioaccumulative
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level

Indication of changes:			
General.			
Section	Changed item	Change	Comments
3	Composition/information on ingredients	Modified	



DX-Cartridge

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SDS US HILTI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 5/12/2025

Issue date: 5/12/2025 Supersedes: 1/25/2022

Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Name	Hilti Spray
Product code	BU Direct Fastening



1.2. Recommended use and restrictions on use

Recommended use	For professional use only, lubricants
-----------------	---------------------------------------

1.3. Supplier

Supplier

Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
US TX 75024 Plano
USA
T +1 9724035800
1-800-879-8000 toll free, F +1 918 254 0522

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-direct.fastening@hilti.com

1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria for section 3.2 of HCS

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.
First-aid measures after skin contact	If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Wash skin with plenty of water.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Do not induce vomiting. Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects No information available.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire Thermal decomposition generates : Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures Ventilate area.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. Store away from other materials.

Other information Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep cool. Protect from sunlight. Store in a well-ventilated place.

Incompatible materials Sources of ignition. Direct sunlight. Moisture.

Storage temperature 5 – 25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hilti Spray
No additional information available

8.2. Appropriate engineering controls

Environmental exposure controls Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Not required for normal conditions of use.

Hand protection:				
In case of repeated or prolonged contact wear gloves. Nitrile rubber gloves				
Type	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12	
Eye protection:				
Not required. Avoid contact with eyes				

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Yellow
Odour	Mixture contains one or more component(s) which have the following odour: characteristic
Odour threshold	No data available
pH	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	300 °C
Flash point	240 °C
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available
Vapour pressure at 50°C	1 hPa
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	0.93 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	200 °C
Viscosity, kinematic	23.4 mm ² /s (40 °C)
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic	23.4 mm ² /s (40 °C)
Symptoms/effects	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects No additional information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	Disposal must be done according to official regulations.
Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Dispose of contents/container to Avoid release to the environment, Refer to manufacturer/supplier for information on recovery/recycling.
Ecological waste information	Avoid release to the environment.

Hilti Spray

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not applicable	Not applicable	Not regulated	Not regulated
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not regulated	Not regulated
14.4. Packing group			
Not applicable	Not applicable	Not regulated	Not regulated
14.5. Environmental hazards			
Not applicable	Not applicable	Not regulated	Not regulated
No supplementary information available			

14.6. Special precautions for user

DOT

Not applicable

TDG

Not applicable

IMDG

Not regulated

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Hilti Spray

Safety Data Sheet

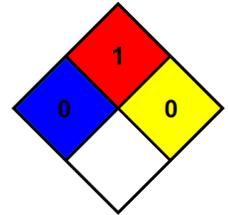
according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date 05/12/2025
 Data sources European Chemicals Agency, <http://echa.europa.eu/>.
 Other information A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis.

NFPA health hazard 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
 NFPA fire hazard 1 - Materials that must be preheated before ignition can occur.
 NFPA reactivity 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:			
General.			
Section	Changed item	Change	Comments
1	Emergency number	Modified	
1	Department issuing data specification sheet:	Modified	
8.2	Personal protection	Added	

SDS US HILTI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

FRP AND FRP ADHESIVES

- 1. NUDO – Fiberlite FRP Panels**
- 2. Panolam – FRP Panels**
- 3. Franklin – Titebond GREENchoice FRP Adhesive**
- 4. Franklin – Titebond Solvent Based FRP Adhesive**



Safety Data Sheet (SDS)

Material Name: FiberLite

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information

Nudo
1500 Taylor Avenue
Springfield, IL 62703

Phone: 217-528-5636
Fax: 217-528-8722

*** Section 2 - Hazards Identification ***

Emergency Overview

No specific hazards anticipated from normal product handling. Dust and other particulates generated during cutting, shaping, or forming may cause eye, skin, and respiratory tract irritation.

Potential Health Effects: Eyes

Dusts and particulates may cause eye irritation.

Potential Health Effects: Skin

Dusts and particulates may cause skin irritation.

Potential Health Effects: Ingestion

Not a likely route of exposure under normal product use conditions.

Potential Health Effects: Inhalation

Dusts and particulates may cause respiratory tract irritation.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component
Not Available	Fiberglass Panel

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Eye injuries from glass particles should be treated by a physician immediately.

First Aid: Skin

For skin contact flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation

Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.
None anticipated.

Hazardous Combustion Products

Not Determined

Extinguishing Media

Use appropriate extinguishing media suitable for surrounding fire.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Safety Data Sheet

Material Name: FiberLite

*** Section 6 - Accidental Release Measures ***

Containment Procedures

None necessary.

Clean-Up Procedures

No special cleanup procedures needed.

Evacuation Procedures

None

Special Procedures

None

*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid dust generation.

Storage Procedures

No special storage procedures needed.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

Engineering Controls

Ventilation is not normally required.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear dust goggles.

Personal Protective Equipment: Skin

None necessary.

Personal Protective Equipment: Respiratory

Not normally needed.

Personal Protective Equipment: General

None

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Multi-colored	Odor:	None
Physical State:	Solid	pH:	NA
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	ND	Melting Point:	ND
Solubility (H2O):	ND	Specific Gravity:	1.6-1.8
Evaporation Rate:	NA	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	ND
Flash Point Method:	ND	Upper Flammability Limit (UFL):	ND
Lower Flammability Limit (LFL):	ND	Burning Rate:	ND
Auto Ignition:	ND		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Avoid dust generation.

Incompatibility

Not Determined

Hazardous Decomposition

Not Determined

Safety Data Sheet

Material Name: FiberLite

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

No LD50/LC50's are available for this product's components.

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not Regulated

TDG Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Informatio

US.California Proposition 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

Safety Data Sheet

Material Name: FiberLite

US – California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed substance

Styrene

Cancer

100-42-5

*** Section 16 - Other Information ***

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

End of Sheet



SAFETY DATA SHEET

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Product: **Fiberglass Reinforced Plastic (FRP)**

Recommended Use: Used for building applications
Manufacturer Information: Panolam Industries International Inc.
325 DeSoto Ave.
Morristown, TN 37813
(423) 587-1842

Emergency Contact (24 hours): CHEMTREC 1-800-424-9300

SECTION II – HAZARD IDENTIFICATION

GHS Classification: Not applicable – Non-hazardous
GHS Signal Word Not applicable – Non-hazardous
GHS Pictograms Not applicable – Non-hazardous
Hazard Statement Not applicable – Non-hazardous
Precautionary Statement May form combustible dust concentrations in air if small particles are generated during further processing, handling or by other means.

SECTION III – COMPOSITION INFORMATION

Panolam FRP panels are solid sheets which are composed of fiberglass, inorganic fillers, pigments and other additives that are embedded in a cured unsaturated polyester resin. These panels are considered as “articles” as defined in the OSHA Hazard Communication standard in 29 CFR 1910.1200 (c) and are not considered hazardous under normal use.

SECTION IV – FIRST AID MEASURES

Inhalation: Material does not vaporize. If exposed to dust remove to fresh air. Get medical attention if irritation persists, or if severe coughing or breathing difficulty occurs.

Eye Contact: Flush eyes with large amounts of water. Remove to fresh air. Get medical attention if irritation persists.

Skin Contact: Wash affected areas with soap and water. Get medical attention if rash or irritation persists or dermatitis occurs.

Ingestion: Rinse mouth with water. Get medical attention if irritation persists.

Recommendations for Immediate Medical Care/Special Treatment: None known.

SECTION V – FIREFIGHTING MEASURES

Extinguishing media: Water Fog, Carbon Dioxide, Dry Chemical, Chemical Foam.

Special Hazards: May form combustible dust concentrations in air if small particles are generated during further processing, handling or by other means.

Panels exposed to fire may liberate oxides of nitrogen and carbon and hydrocarbons.

Recommendations on Protective Equipment: Firefighters should use appropriate personal protective equipment including self-contained breathing apparatus.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions/Emergency Procedures: No special precautions required.

Environmental Precautions: No special precautions required.

Clean-up Procedures: No special procedures required.

SECTION VII – HANDLING AND STORAGE

Precautions to be taken in handling and storing: Store flat if possible. Avoid excessive heat or humidity.

Incompatibility (Materials to Avoid): None Known

SECTION VIII – EXPOSURE CONTROL /PERSONAL PROTECTION

OSHA Permissible Exposure Limits: Particulate TWA: 15.0 mg/m³ (total dust)
TWA: 5.0 mg/m³ (respirable fraction)

Ventilation controls: When dust is created use local ventilation where required to maintain airborne levels below OSHA PELs

Hand protection: Gloves may be worn to prevent contact with rough laminate edges.

Eye protection: Safety glasses or goggles are recommended when machining this material.

Fiberglass Reinforced Plastic (FRP)

Respiratory protection:	None should be required during normal operations. When dust is generated a NIOSH approved respirator may be used when exposure levels to dust are thought to be above regulated values.
Body protection:	No special precautions are required. If exposed to dust wash with soap and water to remove any material from the skin.
Foot protection:	Safety shoes.
General Hygiene/Safety Measures:	Wear protective clothing as necessary to prevent contact. Wash soiled clothing immediately.

SECTION IX - PHYSICAL DATA

Appearance:	Rigid, solid sheet. Various surface colors/textures.
Odor:	Odorless
Odor Threshold:	Not applicable
pH:	Not applicable
Melting Point:	Not applicable
Boiling point:	Not applicable
Flash Point:	Not applicable
Flammability:	Not applicable
Lower Explosion Limit:	Not available
Upper Explosion Limit:	Not available
Autoignition:	>450° F
Decomposition Temperature:	Not available
Vapor pressure:	Not applicable
Specific gravity:	>1
Vapor density:	Not applicable
Partition Coefficient n-octanol/water:	Not applicable
Viscosity:	Not applicable
Solubility in water (% by weight):	Insoluble
Evaporation rate (Butyl acetate = 1):	Not applicable

SECTION X – STABILITY AND REACTIVITY

Reactivity:	Stable under normal conditions of storage and use.
Chemical Stability:	Stable under normal conditions of storage and use.
Possibility of Hazardous Reactions:	None Known.
Conditions to Avoid:	Exposure to moisture. Storage at low or high temperatures.
Incompatibility (Materials to Avoid):	None Known.
Hazardous decomposition products:	Combustion of the material can release styrene and oxides of nitrogen and carbon.

SECTION XI- TOXICOLOGICAL PROPERTIES

Route of Entry: Skin contact [X] Skin absorption [] Eye contact [X]
 Inhalation [X] Ingestion [X]

EFFECTS OF ACUTE EXPOSURE:

Inhalation: Not considered a problem under normal use. Dust generated during machining can cause short-term irritation of the mouth, nose, throat or upper respiratory tract.

Eye Contact: Not considered a problem under normal use. Contact with dust generated during machining can cause short-term irritation.

Skin Contact: Not considered a problem under normal use. Contact with dust generated during machining can cause skin irritation.

Skin Absorption: Not likely to occur

Ingestion: Not considered a problem under normal use.

Toxicity: LD₅₀: Not available
 LC₅₀: Not available

Irritancy: Not available

Sensitization: Not available

Carcinogenicity: Not available

Reproductive toxicity: Not available

Teratogenicity: Not available

Mutagenicity: Not available

Toxicologically synergistic products: Not available

Symptoms of Exposure: No significant reaction to the product is expected.

SECTION XII – ECOLOGICAL INFO

Toxicity: No information available.

Biodegradation and Elimination: Not readily biodegradable.

Bioaccumulation Potential: No information available.

Mobility: No information available.

Additional Information: No additional information available.

SECTION XIII – DISPOSAL CONSIDERATIONS

Waste disposal method:	This product is not considered a hazardous waste under EPA Hazardous Waste Regulations 40 CFR Part 261, however, State and local requirements for waste disposal may differ and should be reviewed. Can be landfilled or incinerated in accordance with local, provincial, state, federal regulations. Do not discharge substance/product into sewer system.
Container disposal	Dispose of in accordance with local, provincial, state, federal regulations.

SECTION XIV – TRANSPORT INFORMATION

PIN Number	Not applicable.
TDG Shipping Name	Not applicable.
TDG Hazard Class	Not applicable.
DOT Class	Not regulated.
IATA	Not regulated.
IMDG	Not regulated.

It is the responsibility of the transporting organization to follow all applicable laws, regulations, and rules relating to the transportation of the material.

SECTION XV – REGULATORY INFORMATION

NFPA Rating: Health: 1 Flammability: 0 Reactivity: 0
HMIS Rating: Health: 1 Flammability: 0 Reactivity: 0

OSHA (29CFR 1910.1200): See Section II of MSDS.

TSCA: All components are listed on the TSCA Inventory.

CERCLA RQ: This product contains the following chemical(s) which have reportable quantities:

None

SARA 311/312: Immediate (Acute) Health Hazard: No
 Delayed (Chronic) Health Hazard: No
 Fire Hazard: No
 Reactive Hazard: No
 Sudden Release of Pressure Hazard: No

SARA 313: This product does not contain chemical(s) in concentrations which should require reporting under SARA 313.

California Prop 65: Warning: This product contains styrene a chemical known to the State of California to cause cancer.

SECTION XVI – OTHER INFORMATION

Revision Date: 6/15/18

DISCLAIMER:

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state, provincial and local laws and regulations. Panolam Industries makes no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Panolam Industries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

Safety Data Sheet

Titebond FRP Adhesive

Section 1. Identification

GHS product identifier	: Titebond FRP Adhesive
Physical state	: Liquid.
Address	: Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	: Franklin Technical Services
Telephone	: (800) 877-4583
In case of emergency	: Franklin Security (614) 445-1300
e-mail address of person responsible for this SDS	: SDS@FranklinInternational.com
Reference number	: 3432
Product code	: 4054
Date of revision	: 12/9/2025
Safety Data Sheets are available online at	: www.FranklinInternational.com
Chemtrec (24 Hour)	: (800) 424 - 9300
Chemtrec International	: +1 703-741-5970

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Adhesive.

Uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.

Section 2. Hazards identification

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if needed.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if needed.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : This product may irritate eyes upon contact.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid. [Paste.]
Color	: Brown. [Light]
Odor	: Characteristic. [Slight]
Odor threshold	: Not available.
pH	: 5
Melting point/freezing point	: Not available.
Boiling point or initial boiling point and boiling range	: 100°C (212°F)

Section 9. Physical and chemical properties

- Flash point** : Closed cup: >93.3°C (>199.9°F) [Setaflash] [Product does not sustain combustion.]
- Evaporation rate** : <1 (butyl acetate = 1)
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Not available.
- VOC (less water, less exempt solvents)** : 27.04 g/l
- Vapor pressure** :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Water	17.5	2.3				

- Relative vapor density** : Not available.
- Relative density** : 1.3852
- Solubility(ies)** :

Media	Result
cold water	Soluble
hot water	Soluble

- Solubility in water** : Not available.
- Miscible with water** : Yes.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary [Product] : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Section 11. Toxicological information

Serious eye damage/eye irritation

Not available.

Conclusion/Summary [Product] : This product may irritate eyes upon contact.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : This product may irritate eyes upon contact.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

Section 15. Regulatory information

U.S. Federal regulations

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

 **WARNING:** This product can expose you to vinyl acetate, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
<input checked="" type="checkbox"/> Vinyl acetate	-	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Section 15. Regulatory information

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

China : Not determined.

United States TSCA 8(b) inventory : All components are active or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of printing : 12/9/2025

Date of issue/Date of revision : 12/9/2025

Date of previous issue : 3/25/2025

Version : 3.2

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

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