

Akonaflex Expansion Joint Filler
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Version 1.0

Akona Manufacturing, LLC.
A TCC Materials Company

2025 Centre Pointe Boulevard, Suite 300 Mendota Heights, MN 55120-1221 **Emergency Telephone Number:** 651-688-9116

Revision Date May 2015

Information Telephone Number

651-905-8137

Section 1: Product Identification

Product Type: Sealant & Adhesive

Akona Product Name:

Akonaflex Expansion Joint Filler

Section 2: Hazard Identification

<u>Classification</u>

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

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

Appearance: Gray paste

Physical State: Self-leveling paste

Odor: Slight

Section 3: Hazardous Ingredients/Composition

Chemical Name	CAS No	Weight-%
Proprietary MS Polymer Blend	MIXTURE	<30
Diisodecyl phthalate	26761-40-0	<20
Calcium Carbonate	1317-65-3	<20
Crystalline silica	14808-60-7	<10
Vinyltrimethoxysilane	2768-02-7	0-3
Titanium dioxide	13463-67-7	<10.0
Non-hazardous Ingredients*	Proprietary	<10

^{*} Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

(Calcium Carbonate, Titanium Dioxide) Inhalation of particulates unlikely due to product's physical state.



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Section 4: First Aid Measures

First Aid Measures

General Advice:

Provide this SDS to medical personnel for treatment.

Eye Contact:

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact:

In case of contact, immediately wash skin with soap and water or water for at least 15 minutes. Remove and wash contaminated clothing before reuse. If irritation persists, seek medical attention.

Inhalation:

Remove to fresh air if breathing is difficult, leave area to obtain fresh air. If breathing remains difficult, get medical attention.

Ingestion:

Do note induce vomiting unless directed by medical personnel. If vomiting occurs, lean patient forward to maintain an open airway and prevent aspiration. Get immediate medical attention.

<u>Most Important Symptoms and Effects, both Acute and Delayed</u> Symptoms:

Prolonged or repeated skin contact may result in dermatitis (red, dry skin). Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness and discomfort. Irritating to mouth, throat, and stomach if ingested. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Overexposure to vapors during application and curing may mildly irritate respiratory tract and result in coughing and sneezing.

<u>Indication of any Immediate Medical Attention and Special Treatment Needed</u> Note to Physicians:

Provide general supportive measures and treat symptomatically. May aggravate pre-existing skin disorders.

Section 5: Fire Fighting Measures

Suitable Extinguishing Media:

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

Small Fire: Use carbon dioxide (CO2), dry chemical or water spray.

Large Fire: Dry chemical. Use foam or water spray.

Unsuitable Extinguishing Media: Not determined.



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Specific Hazards Arising from the Chemical:

Product is combustible & may ignite if exposed to high temperature or direct flame.

Protective Equipment and Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear protective clothing as described in Section 8 of this safety data sheet.

Other Information:

Small Spills: 1 drum or less – Level D Equipment (gloves, chemical resistant apron, boots and eye protection).

Large Spills: Rubber gloves, rubber boots, face shield & Tyvek suit as a minimum. Minimum level of PPE for releases in which the oxygen level is < 19.5% or is unknown, should be Level B: triple gloves (rubber gloves & nitrile gloves over latex gloves), chemical resistant suit, fire-retardant clothing & boots, hard hat & self-contained breathing apparatus.

For Emergency Responders:

Restrict access to spill area.

Environmental precautions:

Minimize use of water to prevent environmental contamination. Prevent spill or rinse from contaminating storm drains, sewers, soil or groundwater. Do not allow discharge containing this material to enter streams, ponds, estuaries, oceans or other waters unless in accordance w/ requirements of National Pollutant Discharge Elimination System (NPDES) permit & permitting authority has been notified in writing prior to discharge. Do not allow discharge containing this material to enter sewer systems w/o previously notifying local sewage treatment plant authority. For information, contact State Water Board or EPA Regional Office.

Other: U.S. regulations may require reporting of spills of this material reaching surface waters if sheen is formed.



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Methods and Material for Containment and Cleaning up Methods for Containment:

Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.

Methods for Cleaning Up:

Sweep up absorbed material and shovel into suitable containers for disposal. Wash area with soap and water. For waste disposal, see section 13 of the SDS.

Section 7: Handling and Storage

Precautions for Safe Handling

Advice on Safe Handling:

Avoid breathing vapors. Use only with adequate ventilation. Open windows and doors to ensure fresh air cross-ventilation during application and curing. Wash thoroughly with soap and water after handling. Avoid contact with skin, eyes or clothing. While handling product keep out of reach of children and pets. Do not eat or drink while handling this material. See section 6 of this SDS for clean up instructions.

<u>Conditions for Safe Storage, Including any Incompatibilities</u> Storage Conditions:

Keep tightly closed in a dry and cool place. Close container after each use. Store containers away from excessive heat & freezing. Do not store at temperatures above 120°F (49°C). Protect from direct sunlight. Store away from incompatible materials. To maximize shelf life, store at temperatures below 80°F (26°C).

Incompatible Materials:

Strong oxidizing agents. Strong bases.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Exposure guidelines / protective equipment are for routine handling and accidental spills.



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Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Carbonate 1317-65-3	-	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
Crystalline silica 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	(vacated) TWA: 0.1 mg/m³ respirable dust : (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 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

Appropriate Engineering Controls

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

<u>Individual Protection Measures, such as Personal Protective Equipment</u>

Eye/Face Protection:

Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations & standards.

Skin and Body Protection:

Skin: Wear chemical impervious gloves (eg: Nitrile or Neoprene). Use triple gloves for spill response. If necessary, refer to appropriate regulations and standards.

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Body: Use protection appropriate for task (eg: lab coat, coveralls, Tyvek suit). If necessary, refer to OSHA Technical Manual (Sec. VII: Personal Protective Equipment) or appropriate Standards of Canada. Use foot protection, as described in appropriate regulations and standards.

Respiratory Protection:

If mists or sprays are created, use appropriate respiratory protection. Oxygen levels below 19.5% considered IDLH by OSHA. In such instances, use fullfacepiece pressure demand SCBA or a full facepiece, supplied air respirator w/ auxillary self-contained air supply.

General Hygiene Considerations:

Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse.

Precautionary Measures: Contact lenses may pose a hazard. Soft lenses may absorb and all lenses may concentrate irritants.

Section 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical State: Self-leveling paste

Appearance: Gray paste

Color: Gray Odor: Slight

Odor Threshold: Not determined

Note: The information below is not **Property** Remarks -Method

intended for use in preparing

product specifications

pH: Not applicable **Melting Point/Freezing Point:** $< 0^{\circ}C / < 32^{\circ}F$ **Boiling Point/Boiling Range:** Not applicable **Flash Point:** > 93.33°C / > 200°F

Evaporation Rate: Slower than n-Butyl Acetate

Flammability (Solid, Gas): Not determined **Upper Flammability Limits:** Not established **Lower Flammability Limits:** Not established **Vapor Pressure:** Not established **Vapor Density:** Heavier than air

Relative Density (Specific Gravity): @ 25°C (77°F) ~1.25 – 1.75

Water Solubility: Dilutable in wet stage

Solubility in Other Solvents: Not determined



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Partition Coefficient:
Autoignition Temperature:
Not established
Decompostion Temperature:
Not determined
Kinematic Viscosity:
Not determined
Dynamic Viscosity:
Not determined
Explosive Properties:
Not determined
Not determined
Not determined

VOC Content (%): < 2% **VOC Content:** < 35 g/L

Section 10: Stability and Reactivity

Reactivity

Cures upon contact with air.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization: Hazardous polymerization does not occur.

Conditions to avoid

Incompatible Materials. Excessive heat or cold.

Incompatible Materials

Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

No hazardous decomposition products if stored & handled as prescribed.

Section 11: Toxicological Information

Information on Likely Routes of Exposure

Product Information

Eye Contact:

Eye contact may result in tearing, redness & pain.

Skin Contact:

Prolonged and frequent contact may cause redness and irritation. Repeated skin contact may cause dermatitis.



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Inhalation:

Overexposure to vapors during application & curing may mildly irritate respiratory tract and result in coughing & sneezing.

Ingestion:

May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Diisodecyl phthalate 26761-40-0	= 64 g/kg (Rat)	> 2900 mg/kg (Rat) > 3160 mg/kg (Rabbit)	> 12.54 mg/L (Rat) 4 h
Crystalline silica 14808-60-7	= 500 mg/kg (Rat)	-	-
Vinyltrimethoxysilane 2768-02-7	= 7340 μL/kg (Rat)	= 3360 µL/kg (Rabbit)	•
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	•

<u>Information on Physical, Chemical and Toxicological Effects</u>

Symptoms:

Please see section 4 of this SDS for symptoms.

<u>Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure</u>

Sensitization:

Not known to be human skin or respiratory sensitizers.

Carcinogenicity:

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

Titanium dioxide is a possible carcinogen when it appears as a respirable dust. Crystalline Silica is considered to be a human carcinogen when in respirable form (dust / powder).

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline silica	A2	Group 1	Known	X
14808-60-7				
Titanium dioxide		Group 2B		Х
13463-67-7				



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ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X – Present

Chronic toxicity:

Repeated or prolonged exposure may result in skin, respiratory, kidney & liver damage. Prolonged & repeated skin contact may result in irritation & possibly dermatitis

Target Organ Effects:

Acute: Eyes & Skin. Chronic: Skin.

Numerical Measures of Toxicity

Not determined

Section 12: Ecological Information

Ecotoxicity

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Product not tested for aquatic or animal toxicity. Release of product to terrestrial, atmospheric & aquatic environments should be avoided.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisims	Crustacea
Diisodecyl	500: 72 h	1: 96 h		500: 24 h
phthalate	Desmodesmus	Pimephales		Daphnia magna
26761-40-0	subspicatus mg/L	promelas mg/L		Straus mg/L
	EC50 0.8:	LC50		EC50 0.02: 48
	96 h	flow-through 0.55:		h Daphnia magna
	Pseudokirchneriella	96 h		mg/L
	subcapitata mg/L EC50	Lepomis		EC50 Static
	static	macrochirus mg/L		
		LC50 static		
		10000: 96 h		
		Leuciscus idus		
		mg/L LC50		
		static		

Persistence and Degradability

Not tested for persistence & biodegradability



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Bioaccumulation

Not tested for bio-accumulation potential

Mobility

Not tested for mobility in soil

Other Adverse Effects

Not determined

Section 13: Disposal Considerations

Waste Treatment Methods

Disposal of Wastes

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

Contaminated Packaging

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

Section 14: Transportation

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOTNot regulatedIATANot regulatedIMDGNot regulated

Section 15: Regulatory Information

International Inventories

TSCA Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List **EINECS/ELINCS** - European Inventory of Existing Chemical

Substances/European List of Notified Chemical Substances **ENCS** - Japan Existing and New Chemical Substances

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IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

SARA 313

Not determined.

CWA (Clean Water Act)

Component	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Diisodecyl phthalate 26761-40-0 (<20)		X		

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Diisodecyl phthalate - 26761-40-0	Developmental
Crystalline silica - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium Carbonate	X	X	X
1317-65-3			
Diisodecyl phthalate			X
26761-40-0			
Crystalline silica	X	X	Х
14808-60-7			
Titanium dioxide	X	X	Х



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13463-67-7		

Section 16: Other Information					
NFPA Health Hazards Flammability 0 Instability Special Hazards Not determined					
HMIS	Health Hazards	Flammability	Physical Hazards	Personal Protection	
	1	0	0	Not determined	

Additional information on the products is available at: www.tccmaterials.com

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express 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 silica contained in our products. Before using any product, read its label and safety data sheet.