



# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** LPS® Cold Galvanize  
**Registration number** -  
**Synonyms** None.  
**Part Number** 00516, M00516  
**Issue date** 19-October-2015  
**Version number** 02  
**Revision date** 07-September-2016  
**Supersedes date** 19-October-2015

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** A zinc rich industrial maintenance primer designed for rust and corrosion protection.  
**Uses advised against** None known.

### 1.3. Details of the supplier of the safety data sheet

**Supplier** Alsco Ltd  
**Company name** Unit 13 Hillmead Industrial Estate  
**Address** Marshall Road  
Swindon, Wiltshire  
United Kingdom SN5 5FZ  
**Telephone** +44 1793 733 900  
**In Case of Emergency** +001 703-527-3887  
**Manufacturer**  
**Company name** ITW Pro Brands  
**Address** 4647 Hugh Howell Rd., Tucker, GA 30084 (U.S.A.)  
**Website** <http://www.lpslabs.com>  
**e-mail** [lpssds@itwprobrands.com](mailto:lpssds@itwprobrands.com)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

**Classification** F+;R12, Carc. Cat. 1;R45, T+; Xn;R20/21-48, Xi;R36, R43, N;R50/53

The full text for all R-phrases is displayed in section 16.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

Aerosols	Category 1	H222 - Extremely flammable aerosol. H229 - Pressurized container: May burst if heated.
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##### Health hazards

Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Serious eye damage/eye irritation	Category 2	H319 - Causes serious eye irritation.
Skin sensitisation	Category 1B	H317 - May cause an allergic skin reaction.
Carcinogenicity	Category 2	H351 - Suspected of causing cancer.

Specific target organ toxicity - repeated exposure	Category 1 (Central nervous system)	H372 - Causes damage to organs (Central nervous system) through prolonged or repeated exposure.
Specific target organ toxicity - repeated exposure	Category 2 (auditory organ, liver, Kidney)	H373 - May cause damage to organs (auditory organ, liver, Kidney) through prolonged or repeated exposure.
<b>Environmental hazards</b>		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 1	H410 - Very toxic to aquatic life with long lasting effects.

## Hazard summary

<b>Physical hazards</b>	Extremely flammable.
<b>Health hazards</b>	May cause cancer. Also harmful by inhalation and in contact with skin. Irritating to eyes. May cause sensitisation by skin contact. Danger of serious damage to health by prolonged exposure. Occupational exposure to the substance or mixture may cause adverse health effects.
<b>Environmental hazards</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Specific hazards</b>	Prolonged exposure may cause chronic effects.
<b>Main symptoms</b>	Narcosis. Behavioural changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. Oedema. Jaundice. Prolonged exposure may cause chronic effects.

## 2.2. Label elements

### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Benzene, 1-Chloro-4 (Trifluoromethyl), Ethylbenzene, Methyl ethyl ketone, Mineral Spirits Regular Stoddard Solvent, Petroleum Gases, Liquefied, Sweetened, Xylene

### Hazard pictograms



### Signal word

Danger

### Hazard statements

H332	Harmful if inhaled.
H332	Harmful if inhaled.
H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H372	Causes damage to organs (Central nervous system) through prolonged or repeated exposure.
H373	May cause damage to organs (auditory organ, liver, Kidney) through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

### Precautionary statements

#### Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
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.
P260	Do not breathe gas.
P264	Wash 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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

#### Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313  
P362 + P364  
P391

If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
Collect spillage.

#### Storage

P405  
P410 + P412

Store locked up.  
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

#### Disposal

P501

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

**Supplemental label information** 23,1 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. EUH208 - Contains Benzene, 1-Chloro-4 (Trifluoromethyl). May produce an allergic reaction.

**2.3. Other hazards** None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Metallic Zinc	30 - 40	7440-66-6 231-175-3	-	030-001-01-9	
<b>Classification:</b>	<b>DSD:</b> F;R15-R17, N;R50/53				
	<b>CLP:</b> Pyr. Sol. 1;H250, Aquatic Chronic 1;H410				T
Acetone	10 - 20	67-64-1 200-662-2	-	606-001-00-8	#
<b>Classification:</b>	<b>DSD:</b> F;R11, Xi;R36, R66-67				
	<b>CLP:</b> Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336				
Petroleum Gases, Liquefied, Sweetened	10 - 20	68476-86-8 270-705-8	-	649-203-00-1	
<b>Classification:</b>	<b>DSD:</b> F+;R12, Carc. Cat. 1;R45, Muta. Cat. 2;R46				K,S
	<b>CLP:</b> Muta. 1B;H340, Carc. 1A;H350				K,S,U
Xylene	5 - 10	1330-20-7 215-535-7	-	601-022-00-9	#
<b>Classification:</b>	<b>DSD:</b> R10, Xn;R20/21, Xi;R38				C
	<b>CLP:</b> Flam. Liq. 3;H226, Acute Tox. 4;H312, Skin Irrit. 2;H315, Acute Tox. 4;H332, Aquatic Chronic 2;H411				C
Benzene, 1-Chloro-4 (Trifluoromethyl)	1 - 10	98-56-6 202-681-1	-	-	
<b>Classification:</b>	<b>DSD:</b> Xn;R22				
	<b>CLP:</b> Flam. Liq. 3;H226, Skin Sens. 1B;H317, Aquatic Chronic 2;H411				
Ethylbenzene	1 - 3	100-41-4 202-849-4	-	601-023-00-4	#
<b>Classification:</b>	<b>DSD:</b> F;R11, Xn;R20-65-48/20				
	<b>CLP:</b> Flam. Liq. 2;H225, Asp. Tox. 1;H304, Acute Tox. 4;H332, Carc. 2;H351, STOT RE 2;H373, Aquatic Chronic 2;H411				
Mineral Spirits Regular Stoddard Solvent	1 - 3	8052-41-3 232-489-3	-	649-345-00-4	
<b>Classification:</b>	<b>DSD:</b> Xn;R65-48/20				P
	<b>CLP:</b> Flam. Liq. 3;H226, Asp. Tox. 1;H304, STOT RE 1;H372				P

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Zinc oxide	1 - 3	1314-13-2 215-222-5	-	030-013-00-7	
<b>Classification:</b>		<b>DSD:</b> N;R50/53 <b>CLP:</b> Aquatic Chronic 1;H410			
Silica, amorphous	< 1	7631-86-9 231-545-4	-	-	
<b>Classification:</b>		<b>DSD:</b> T+;R26 <b>CLP:</b> Acute Tox. 2;H330			
Silicic Acid, Calcium Salt	< 1	1344-95-2 215-710-8	-	-	
<b>Classification:</b>		<b>DSD:</b> T;R23 <b>CLP:</b> Acute Tox. 3;H331			

#### List of abbreviations and symbols that may be used above

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

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

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note K: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8).

Note P: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).

Note S: This substance may not require a label according to Article 17 (see section 1.3 of Annex I) (Table 3.1). This substance may not require a label according to Article 23 of Directive 67/548/EEC (see section 8 of Annex VI to that Directive) (Table 3.2).

Note U: When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

**Composition comments** The full text for all R- and H-phrases is displayed in section 16.

## SECTION 4: First aid measures

**General information** IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical advice/attention if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed** Narcosis. Behavioural changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. Oedema. Jaundice. Prolonged exposure may cause chronic effects.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

<b>General fire hazards</b>	Extremely flammable aerosol.
<b>5.1. Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Alcohol resistant foam. Powder. Dry sand. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	Contents under pressure. Pressurised container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Special fire fighting procedures</b>	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.
<b>Specific methods</b>	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.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe 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. Use personal protection recommended in Section 8 of the SDS.
<b>For emergency responders</b>	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
<b>6.2. Environmental precautions</b>	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.
<b>6.3. Methods and material for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. The product is immiscible with water and will spread on the water surface. Prevent entry into waterways, sewer, basements or confined areas.  Large Spills: Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Scoop up used absorbent into drums or other appropriate container. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers.
<b>6.4. Reference to other sections</b>	Use personal protection recommended in Section 8 of the SDS. For waste disposal, see section 13.

## SECTION 7: Handling and storage

<b>7.1. Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurised 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 breathe gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from heat, sparks and open flame. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
<b>7.3. Specific end use(s)</b>	Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value	Form
Acetone (CAS 67-64-1)	MAK	1200 mg/m <sup>3</sup> 500 ppm	
	STEL	4800 mg/m <sup>3</sup> 2000 ppm	
Ethylbenzene (CAS 100-41-4)	Ceiling	880 mg/m <sup>3</sup>	
	MAK	200 ppm 440 mg/m <sup>3</sup>	
Silica, amorphous (CAS 7631-86-9)	MAK	100 ppm 4 mg/m <sup>3</sup>	Inhalable fraction.
Xylene (CAS 1330-20-7)	MAK	221 mg/m <sup>3</sup> 50 ppm	
	STEL	442 mg/m <sup>3</sup> 100 ppm	
Zinc oxide (CAS 1314-13-2)	MAK	5 mg/m <sup>3</sup>	Fume and respirable dust.

##### Belgium. Exposure Limit Values.

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	2420 mg/m <sup>3</sup> 1000 ppm	
	TWA	1210 mg/m <sup>3</sup> 500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	551 mg/m <sup>3</sup>	
	TWA	125 ppm 442 mg/m <sup>3</sup>	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm 533 mg/m <sup>3</sup>	
	TWA	10 mg/m <sup>3</sup>	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	10 mg/m <sup>3</sup>	
	STEL	442 mg/m <sup>3</sup> 100 ppm	
Xylene (CAS 1330-20-7)	TWA	221 mg/m <sup>3</sup> 50 ppm	
	STEL	10 mg/m <sup>3</sup>	Fume.
	TWA	10 mg/m <sup>3</sup>	Respirable fraction.
	TWA	5 mg/m <sup>3</sup> 2 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Fume. Respirable fraction. Dust.

##### Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1400 mg/m <sup>3</sup>	
	TWA	600 mg/m <sup>3</sup>	
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m <sup>3</sup>	
	TWA	435 mg/m <sup>3</sup>	
Silica, amorphous (CAS 7631-86-9)	TWA	10 mg/m <sup>3</sup>	Inhalable fraction.
	STEL	0,07 mg/m <sup>3</sup> 442 mg/m <sup>3</sup>	Respirable fraction.
Xylene (CAS 1330-20-7)	TWA	100 ppm 221 mg/m <sup>3</sup>	
	STEL	50 ppm 10 mg/m <sup>3</sup>	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m <sup>3</sup>	

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

Components	Type	Value	Form
	TWA	5 mg/m3	

**Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	MAC	1210 mg/m3 500 ppm	
	STEL	3620 mg/m3 1500 ppm	
Ethylbenzene (CAS 100-41-4)	MAC	442 mg/m3	
	STEL	100 ppm 884 mg/m3 200 ppm	
Silica, amorphous (CAS 7631-86-9)	MAC	6 mg/m3	Total dust.
Silicic Acid, Calcium Salt (CAS 1344-95-2)	MAC	2,4 mg/m3 4 mg/m3	Respirable dust. Respirable dust.
Xylene (CAS 1330-20-7)	MAC	10 mg/m3 221 mg/m3 50 ppm	Total dust.
	STEL	442 mg/m3 100 ppm	
Zinc oxide (CAS 1314-13-2)	MAC	5 mg/m3	
	STEL	10 mg/m3	

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.**

Components	Type	Value	Form
Silica, amorphous (CAS 7631-86-9)	TWA	2 mg/m3	
Zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	Fume.

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value
Acetone (CAS 67-64-1)	Ceiling	1500 mg/m3
	TWA	800 mg/m3
Ethylbenzene (CAS 100-41-4)	Ceiling	500 mg/m3
	TWA	200 mg/m3
Xylene (CAS 1330-20-7)	Ceiling	400 mg/m3
	TWA	200 mg/m3
Zinc oxide (CAS 1314-13-2)	Ceiling	5 mg/m3
	TWA	2 mg/m3

**Denmark. Exposure Limit Values**

Components	Type	Value
Acetone (CAS 67-64-1)	TLV	600 mg/m3 250 ppm
Ethylbenzene (CAS 100-41-4)	TLV	217 mg/m3 50 ppm
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TLV	145 mg/m3
Xylene (CAS 1330-20-7)	TLV	25 ppm 109 mg/m3 25 ppm
Zinc oxide (CAS 1314-13-2)	TLV	4 mg/m3

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm	

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Components	Type	Value	Form
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
	TWA	200 ppm 442 mg/m3 100 ppm	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	600 mg/m3	
	TWA	100 ppm 300 mg/m3 50 ppm	
Silica, amorphous (CAS 7631-86-9)	TWA	2 mg/m3	Respirable dust.
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	10 mg/m3	
Xylene (CAS 1330-20-7)	STEL	450 mg/m3	
	TWA	100 ppm 200 mg/m3 50 ppm	
Zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	

**Finland. Workplace Exposure Limits Components**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1500 mg/m3	
	TWA	630 ppm 1200 mg/m3 500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	880 mg/m3	
	TWA	200 ppm 220 mg/m3 50 ppm	
Xylene (CAS 1330-20-7)	STEL	440 mg/m3	
	TWA	100 ppm 220 mg/m3 50 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
	TWA	2 mg/m3	Fume.

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984 Components**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	VLE	2420 mg/m3	
	VME	1000 ppm 1210 mg/m3 500 ppm	
Ethylbenzene (CAS 100-41-4)	VLE	442 mg/m3	
	VME	100 ppm 88,4 mg/m3 20 ppm	
Xylene (CAS 1330-20-7)	VLE	442 mg/m3	
	VME	100 ppm 221 mg/m3 50 ppm	
Zinc oxide (CAS 1314-13-2)	VME	5 mg/m3	Fume.
		10 mg/m3	Dust.

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1200 mg/m3	
Ethylbenzene (CAS 100-41-4)	TWA	500 ppm	
		88 mg/m3	

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Components	Type	Value	Form
Metallic Zinc (CAS 7440-66-6)	TWA	20 ppm	Inhalable fraction.
		2 mg/m3	
Silica, amorphous (CAS 7631-86-9)	TWA	0,1 mg/m3	Respirable fraction. Inhalable fraction.
		4 mg/m3	
Xylene (CAS 1330-20-7)	TWA	440 mg/m3	
		100 ppm	

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	AGW	1200 mg/m3	
		500 ppm	
Ethylbenzene (CAS 100-41-4)	AGW	88 mg/m3	
Silica, amorphous (CAS 7631-86-9)	AGW	20 ppm	Inhalable fraction.
		4 mg/m3	
Xylene (CAS 1330-20-7)	AGW	440 mg/m3	
		100 ppm	

**Greece. OELs (Decree No. 90/1999, as amended)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	3560 mg/m3	
	TWA	1780 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3	
	TWA	125 ppm 435 mg/m3	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	100 ppm 720 mg/m3	
	TWA	125 ppm 575 mg/m3	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	100 ppm	Respirable.
		5 mg/m3	
Xylene (CAS 1330-20-7)	STEL	10 mg/m3 650 mg/m3	Inhalable
	TWA	150 ppm 435 mg/m3	
Zinc oxide (CAS 1314-13-2)	STEL	100 ppm 10 mg/m3	Fume. Fume.
	TWA	5 mg/m3	

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	2420 mg/m3	
	TWA	1210 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
	TWA	442 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
	TWA	221 mg/m3	
Zinc oxide (CAS 1314-13-2)	STEL	20 mg/m3	Respirable. Respirable.
	TWA	5 mg/m3	

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	600 mg/m3	
		250 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value	Form
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	200 ppm 200 mg/m3	
	TWA	50 ppm 145 mg/m3	
Xylene (CAS 1330-20-7)	STEL	25 ppm 442 mg/m3	
	TWA	100 ppm 109 mg/m3	
Zinc oxide (CAS 1314-13-2)	TWA	25 ppm 4 mg/m3	Fume.

**Ireland. Occupational Exposure Limits**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
	TWA	200 ppm 442 mg/m3	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm 573 mg/m3	
	TWA	442 mg/m3	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	100 ppm 4 mg/m3	Respirable dust.
	TWA	10 mg/m3	Total inhalable dust.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
	TWA	100 ppm 221 mg/m3	
Zinc oxide (CAS 1314-13-2)	STEL	50 ppm 10 mg/m3	Respirable fraction and fume.
	TWA	2 mg/m3	Respirable fraction and fume.

**Italy. Occupational Exposure Limits**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3	
	TWA	200 ppm 442 mg/m3	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm 100 ppm	
	TWA	100 ppm	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	1 mg/m3	Inhalable fraction.
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
	TWA	100 ppm 221 mg/m3	
Zinc oxide (CAS 1314-13-2)	STEL	50 ppm 10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3 500 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
		200 ppm
	TWA	442 mg/m3
		100 ppm
Propylene carbonate (CAS 108-32-7)	TWA	2 mg/m3
Silica, amorphous (CAS 7631-86-9)	TWA	1 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm
Zinc oxide (CAS 1314-13-2)	TWA	0,5 mg/m3

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
		1000 ppm
	TWA	1210 mg/m3
		500 ppm
Benzene, 1-Chloro-4 (Trifluoromethyl) (CAS 98-56-6)	TWA	20 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Propylene carbonate (CAS 108-32-7)	TWA	7 mg/m3
Xylene (CAS 1330-20-7)	STEL	450 mg/m3
		100 ppm
	TWA	200 mg/m3
		50 ppm
Zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3

**Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A**

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)**

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Netherlands. OELs (binding)**

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2420 mg/m3
	TWA	1210 mg/m3
Ethylbenzene (CAS 100-41-4)	STEL	430 mg/m3
	TWA	215 mg/m3
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
	TWA	210 mg/m3

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value
Acetone (CAS 67-64-1)	TLV	295 mg/m3
		125 ppm
Ethylbenzene (CAS 100-41-4)	TLV	20 mg/m3
		5 ppm
Xylene (CAS 1330-20-7)	TLV	108 mg/m3
		25 ppm
Zinc oxide (CAS 1314-13-2)	TLV	5 mg/m3

**Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1800 mg/m3	
	TWA	600 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	400 mg/m3	
	TWA	200 mg/m3	
Xylene (CAS 1330-20-7)	TWA	100 mg/m3	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Inhalable fraction.
	TWA	5 mg/m3	Inhalable fraction.

**Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)**

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m3
		500 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m3
		200 ppm
	TWA	442 mg/m3
		100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m3
		100 ppm
	TWA	221 mg/m3
		50 ppm

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	125 ppm	
	TWA	100 ppm	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm	
		100 ppm	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	10 mg/m3	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3	

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value	Form
Ethylbenzene (CAS 100-41-4)	STEL	500 ppm 884 mg/m3	
	TWA	200 ppm 442 mg/m3	
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	100 ppm 1000 mg/m3	
	TWA	700 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3 100 ppm	
	TWA	221 mg/m3 50 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	500 ppm 884 mg/m3	
	TWA	200 ppm 442 mg/m3	
Metallic Zinc (CAS 7440-66-6)	TWA	100 ppm 2 mg/m3	Inhalable fraction.
		0,1 mg/m3	Respirable fraction.
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)	STEL	600 mg/m3	
	TWA	100 ppm 300 mg/m3	
Xylene (CAS 1330-20-7)	STEL	50 ppm 442 mg/m3	
	TWA	100 ppm 221 mg/m3	
Zinc oxide (CAS 1314-13-2)	STEL	50 ppm 1 mg/m3	Respirable fume.
	TWA	1 mg/m3	Respirable fume.

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3	
Ethylbenzene (CAS 100-41-4)	TWA	500 ppm 442 mg/m3	
		100 ppm	
Silica, amorphous (CAS 7631-86-9)	TWA	4 mg/m3	Inhalable fraction.
Xylene (CAS 1330-20-7)	TWA	221 mg/m3	
		50 ppm	
Zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	Respirable fume.

**Spain. Occupational Exposure Limits**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	TWA	1210 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	500 ppm 884 mg/m3	
		200 ppm	
	TWA	441 mg/m3 100 ppm	

**Spain. Occupational Exposure Limits**

Components	Type	Value	Form
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	10 mg/m3	
Xylene (CAS 1330-20-7)	STEL	442 mg/m3	
	TWA	100 ppm 221 mg/m3 50 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	1200 mg/m3 500 ppm	
	TWA	600 mg/m3 250 ppm	
Ethylbenzene (CAS 100-41-4)	Ceiling	884 mg/m3	
	TWA	200 ppm 220 mg/m3 50 ppm	
Xylene (CAS 1330-20-7)	Ceiling	442 mg/m3 100 ppm	
	TWA	221 mg/m3 50 ppm	
Zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	Total dust.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	2400 mg/m3 1000 ppm	
	TWA	1200 mg/m3 500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	220 mg/m3	
	TWA	50 ppm 220 mg/m3 50 ppm	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	3 mg/m3	Respirable dust.
	STEL	870 mg/m3 200 ppm	
Xylene (CAS 1330-20-7)	TWA	435 mg/m3 100 ppm	
	STEL	3 mg/m3	Fume and respirable dust.
Zinc oxide (CAS 1314-13-2)	STEL	3 mg/m3	Fume and respirable dust.
	TWA	3 mg/m3	Fume and respirable dust.

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value	Form
Acetone (CAS 67-64-1)	STEL	3620 mg/m3 1500 ppm	
	TWA	1210 mg/m3 500 ppm	
Ethylbenzene (CAS 100-41-4)	STEL	552 mg/m3	
	TWA	125 ppm 441 mg/m3 100 ppm	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	TWA	4 mg/m3	Respirable dust.
Xylene (CAS 1330-20-7)	STEL	10 mg/m3	Inhalable dust.
		441 mg/m3 100 ppm	

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value	Form
	TWA	220 mg/m <sup>3</sup> 50 ppm	

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
Acetone (CAS 67-64-1)	TWA	1210 mg/m <sup>3</sup> 500 ppm
Ethylbenzene (CAS 100-41-4)	STEL	884 mg/m <sup>3</sup> 200 ppm
	TWA	442 mg/m <sup>3</sup> 100 ppm
Xylene (CAS 1330-20-7)	STEL	442 mg/m <sup>3</sup> 100 ppm
	TWA	221 mg/m <sup>3</sup> 50 ppm

**Biological limit values****Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)**

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	20 mg/g	Acetone	Creatinine in urine	*
	20 mg/l	Acetone	Blood	*
	0,34 mmol/l	Acetone	Blood	*
	38,95 mmol/mol	Acetone	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	1,5 g/g	Mandelic acid	Creatinine in urine	*
	1,5 mg/l	Ethylbenzene	Blood	*
	1,12 mol/mol	Mandelic acid	Creatinine in urine	*
	83,2 nmol/l	Ethylbenzene	End-exhaled air	*
	2 ppm	Ethylbenzene	End-exhaled air	*
Xylene (CAS 1330-20-7)	14,13 umol/l	Ethylbenzene	Blood	*
	1,5 g/g	Methylhippuric acids	Creatinine in blood	*
	1,5 mg/l	Xylene	Blood	*
	0,88 mol/mol	Methylhippuric acids	Creatinine in blood	*
	14,13 umol/l	Xylene	Blood	*

\* - For sampling details, please see the source document.

**Czech Republic. Limit Values for Indicators of Biological Exposure Tests in Urine and Blood, Annex 2, Tables 1 and 2, Government Decree 432/2003 Sb.**

Components	Value	Determinant	Specimen	Sampling time
Ethylbenzene (CAS 100-41-4)	1100 µmol/mmol	Mandelic acid	Creatinine in urine	*
	1500 mg/g	Mandelic acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	820 µmol/mmol	Methylhippuric acids	Creatinine in urine	*
	1400 mg/g	Methylhippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Finland. HTP-arvot, App 2., Biological Limit Values, (BRA/BGV) , Social Affairs and Ministry of Health**

Components	Value	Determinant	Specimen	Sampling time
Ethylbenzene (CAS 100-41-4)	5,2 mmol/l	Mandelic acid	Urine	*
Xylene (CAS 1330-20-7)	5 mmol/l	Methylhippuric acids	Urine	*

\* - For sampling details, please see the source document.

**France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065))**

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	100 mg/l	Acétone	Urine	*
Ethylbenzene (CAS 100-41-4)	1500 mg/g	Acide mandélique	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1500 mg/g	Acides méthylhippuriques	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Germany. TRGS 903, BAT List (Biological Limit Values)**

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	80 mg/l	Aceton	Urine	*
Ethylbenzene (CAS 100-41-4)	300 mg/l	Mandelsäure plus Phenylglyoxylsäure	Urine	*
Xylene (CAS 1330-20-7)	2000 mg/l	Methylhippur-(Tolur-) säure (alle Isomere)	Urine	*
	1,5 mg/l	Xylol	Blood	*

\* - For sampling details, please see the source document.

**Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices**

Components	Value	Determinant	Specimen	Sampling time
Ethylbenzene (CAS 100-41-4)	1500 mg/g	mandelic acid	Creatinine in urine	*
	1110 µmol/mmol	mandelic acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1500 mg/g	methyl hippuric acids	Creatinine in urine	*
	860 µmol/mmol	methyl hippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2**

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	53,36 mg/g	Acetone	Creatinine in urine	*
	80 mg/l	Acetone	Urine	*
Ethylbenzene (CAS 100-41-4)	8,03 mg/g	2-ethylphenol	Creatinine in urine	*
	12 mg/l	2-ethylphenol	Urine	*
Xylene (CAS 1330-20-7)	1334 mg/g	Methylhippuric acids	Creatinine in urine	*
	2000 mg/l	Methylhippuric acids	Urine	*
	1,5 mg/l	Xylene	Blood	*

\* - For sampling details, please see the source document.

**Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4**

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	50 mg/l	Acetona	Urine	*
Ethylbenzene (CAS 100-41-4)	700 mg/g	Suma del acido mandélico y el ácido fenilglioxílico	Creatinine in urine	*
		Ácidos metilhipúricos	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1 g/g	Ácidos metilhipúricos	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)**

Components	Value	Determinant	Specimen	Sampling time
Acetone (CAS 67-64-1)	80 mg/l	Aceton	Urine	*

**Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)**

Components	Value	Determinant	Specimen	Sampling time
Ethylbenzene (CAS 100-41-4)	800 mg/l	Mandelsäure plus Phenylglyoxylsäure	Urine	*
Xylene (CAS 1330-20-7)	1,5 g/g	Methyl-Hippursäure	Creatinine in urine	*
	1,5 mg/l	Xylol	Blood	*

\* - For sampling details, please see the source document.

**UK. EH40 Biological Monitoring Guidance Values (BMGVs)**

Components	Value	Determinant	Specimen	Sampling time
Xylene (CAS 1330-20-7)	650 mmol/mol	Methyl hippuric acid	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines****EU Exposure Limit Values: Skin designation**

Ethylbenzene (CAS 100-41-4) Can be absorbed through the skin.  
Xylene (CAS 1330-20-7) Can be absorbed through the skin.

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

Ethylbenzene (CAS 100-41-4) Can be absorbed through the skin.  
Xylene (CAS 1330-20-7) Can be absorbed through the skin.

**8.2. Exposure controls**

**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. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**General information** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**- Hand protection** Wear appropriate chemical resistant gloves.

**- Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Observe any medical surveillance requirements. 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. Contaminated work clothing should not be allowed out of the workplace.

**Environmental exposure controls** Inform appropriate managerial or supervisory personnel of all environmental releases.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Appearance**

**Physical state** Gas.  
**Form** Aerosol  
**Colour** Light grey. Opaque.

**Odour** Aromatic. Hydrocarbon-like.

**Odour threshold** Not available.

<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	< 23,0 °C (< 73,4 °F)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Flammable gas
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	0,9
<b>Explosive limit – upper (%)</b>	10,5
<b>Vapour pressure</b>	> 1 kPa @ 25°C
<b>Vapour density</b>	> 1 (Air = 1)
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble in water
<b>Solubility (other)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	3000 - 4500 cSt
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.
<b>9.2. Other information</b>	
<b>Density</b>	14,71 g/cm <sup>3</sup>
<b>Heat of combustion</b>	20 - 30 kJ/g
<b>Percent volatile</b>	55,4 %
<b>Specific gravity</b>	1,76 @ 25°C
<b>VOC</b>	0,76 MIR per U.S. State and Federal Aerosol Coating Regulations

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong acids. Strong oxidising agents. Halogens.
<b>10.6. Hazardous decomposition products</b>	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	May cause damage to organs through prolonged or repeated exposure by inhalation.
<b>Skin contact</b>	Harmful in contact with skin. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Symptoms</b>	Narcosis. Behavioural changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. Oedema. Jaundice.
<b>11.1. Information on toxicological effects</b>	
<b>Acute toxicity</b>	Harmful in contact with skin. Harmful if inhaled.

Components	Species	Test results
Acetone (CAS 67-64-1)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 20 ml/kg, 24 Hours
<b>Inhalation</b>		
<i>Vapour</i>		
LC50	Rat	50,1 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	9,1 ml/kg
Benzene, 1-Chloro-4 (Trifluoromethyl) (CAS 98-56-6)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rat	1,13 - 1,43 ml/kg
<b>Oral</b>		
LD50	Rat	1,39 ml/kg
Ethylbenzene (CAS 100-41-4)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	17,8 ml/kg, 24 Hours
<b>Inhalation</b>		
<i>Vapour</i>		
LC50	Rat	4000 ppm, 4 Hours
<b>Oral</b>		
LD50	Rat	3500 mg/kg
Metallic Zinc (CAS 7440-66-6)		
<b><u>Acute</u></b>		
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	> 5410 mg/m <sup>3</sup> , 4 Hours
<b>Oral</b>		
LD50	Rat	630 mg/kg
Silica, amorphous (CAS 7631-86-9)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	> 0,14 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 3300 mg/kg
Silicic Acid, Calcium Salt (CAS 1344-95-2)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	> 0,69 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Xylene (CAS 1330-20-7)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 ml/kg, 4 Hours

Components	Species	Test results
<b>Inhalation</b>		
<i>Vapour</i>		
LC50	Rat	6700 ppm, 4 Hours
<b>Oral</b>		
LD50	Rat	10 ml/kg
Zinc oxide (CAS 1314-13-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Inhalation</b>		
LC50	Rat	> 5700 mg/m <sup>3</sup> , 4 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory sensitisation</b>	Not a respiratory sensitizer.	
<b>Skin sensitisation</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	Suspected of causing cancer.	
<b>ACGIH Carcinogens</b>		
Acetone (CAS 67-64-1)	Not classifiable as a human carcinogen. A4	
Ethylbenzene (CAS 100-41-4)	Confirmed animal carcinogen with unknown relevance to humans. A3	
Silicic Acid, Calcium Salt (CAS 1344-95-2)	Not classifiable as a human carcinogen. A4	
Xylene (CAS 1330-20-7)	Not classifiable as a human carcinogen. A4	
<b>Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)</b>		
Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)		
Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)		
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.	
Silica, amorphous (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.	
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure. May cause damage to organs (auditory organ, liver, Kidney) through prolonged or repeated exposure.	
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Mixture versus substance information</b>	No information available.	
<b>Other information</b>	Symptoms may be delayed.	

## SECTION 12: Ecological information

**12.1. Toxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test results
Acetone (CAS 67-64-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss) 4740 - 6330 mg/l, 96 hours
Ethylbenzene (CAS 100-41-4)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1,37 - 4,4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 7,5 - 11 mg/l, 96 hours

Components	Species		Test results
Metallic Zinc (CAS 7440-66-6)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	2,8 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0,56 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
<b>Aquatic</b>			
Fish	LC50	Bluegill (Lepomis macrochirus)	7,711 - 9,591 mg/l, 96 hours
Zinc oxide (CAS 1314-13-2)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	2246 mg/l, 96 hours

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

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water (log Kow)

Acetone	-0,24
Ethylbenzene	3,15
Mineral Spirits Regular Stoddard Solvent	3,16 - 7,15
Xylene	3,12 - 3,2

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** Not available.

**12.6. Other adverse effects** None known.

**12.7. Additional information**

#### Estonia Dangerous substances in groundwater Data

Ethylbenzene (CAS 100-41-4)	Ethylbenzene 0,5 UG/L
	Ethylbenzene 50 UG/L
Metallic Zinc (CAS 7440-66-6)	Zinc (Zn) 50 UG/L
	Zinc (Zn) 5000 UG/L

#### Estonia Dangerous substances in soil Data

Ethylbenzene (CAS 100-41-4)	Ethylbenzene 0,1 mg/kg
	Ethylbenzene 5 mg/kg
	Ethylbenzene 50 mg/kg
Metallic Zinc (CAS 7440-66-6)	Zinc (Zn) 1000 mg/kg
	Zinc (Zn) 200 mg/kg
	Zinc (Zn) 500 mg/kg

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Residual waste** 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. Do not re-use empty containers.

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

**Disposal methods/information** 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.

**Special precautions** Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

**14.1. UN number** UN1950

**14.2. UN proper shipping name** Aerosols, flammable

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**Label(s)** 2.1

**Hazard No. (ADR)** Not available.

**Tunnel restriction code** Not available.

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards** Yes

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**RID**

**14.1. UN number** UN1950

**14.2. UN proper shipping name** Aerosols, flammable

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**Label(s)** 2.1

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards** Yes

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**ADN**

**14.1. UN number** UN1950

**14.2. UN proper shipping name** Aerosols, flammable

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**Label(s)** 2.1

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards** Yes

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IATA**

**14.1. UN number** UN1950

**14.2. UN proper shipping name** Aerosols, flammable

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**Label(s)** 2.1

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards** Yes

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

**IMDG**

**14.1. UN number** UN1950

**14.2. UN proper shipping name** Aerosols, flammable, MARINE POLLUTANT

**14.3. Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**Label(s)** 2.1

**14.4. Packing group** Not applicable.

**14.5. Environmental hazards**

**Marine pollutant** Yes

**EmS** Not available.

**14.6. Special precautions for user**

Read safety instructions, SDS and emergency procedures before handling.

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

Not applicable.

ADN; ADR; IATA; IMDG; RID



**Marine pollutant**



**General information**

IMDG Regulated Marine Pollutant.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulations**

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

**Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Acetone (CAS 67-64-1)

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Mineral Spirits Regular Stoddard Solvent (CAS 8052-41-3)

Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)

## Other EU regulations

### Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Acetone (CAS 67-64-1)  
Ethylbenzene (CAS 100-41-4)  
Metallic Zinc (CAS 7440-66-6)  
Petroleum Gases, Liquefied, Sweetened (CAS 68476-86-8)  
Xylene (CAS 1330-20-7)  
Zinc oxide (CAS 1314-13-2)

## Other regulations

Pregnant women should not work with the product, if there is the least risk of exposure. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

## National regulations

Follow national regulation for work with chemical agents. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

## 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

### List of abbreviations

Not available.

### References

Not available.

### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

### Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R10 Flammable.  
R11 Highly flammable.  
R12 Extremely flammable.  
R15 Contact with water liberates extremely flammable gases.  
R17 Spontaneously flammable in air.  
R20 Harmful by inhalation.  
R20/21 Harmful by inhalation and in contact with skin.  
R22 Harmful if swallowed.  
R23 Toxic by inhalation.  
R26 Very toxic by inhalation.  
R36 Irritating to eyes.  
R38 Irritating to skin.  
R43 May cause sensitisation by skin contact.  
R45 May cause cancer.  
R46 May cause heritable genetic damage.  
R48 Danger of serious damage to health by prolonged exposure.  
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.  
H225 Highly flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H250 Catches fire spontaneously if exposed to air.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H331 Toxic if inhaled.  
H332 Harmful if inhaled.  
H336 May cause drowsiness or dizziness.  
H340 May cause genetic defects.  
H350 May cause cancer.  
H351 Suspected of causing cancer.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.

**Revision information****Training information****Disclaimer**

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

Follow training instructions when handling this material.

ITW Pro Brands 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 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.