



# SAFETY DATA SHEET

Metal / Cladding Topcoat

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

### 1.1 Product identifier

**Product name** : Metal / Cladding Topcoat  
**Product description** : Paint  
**Product type** : Liquid.  
**UFI** : 6HF1-D0CE-R00P-E6X1

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

Identified uses	
Industrial use Professional use	
Uses advised against	Reason
Consumer use	Product is not intended for consumer use.

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

RUST-OLEUM EUROPE  
Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium  
Telephone no.: +32 (0) 13 460 200  
Fax no.: +32 (0) 13 460 201

Tor Coatings Limited  
Unit 21, White Rose Way, Follingsby Park, Gateshead, Tyne & Wear, NE10 8YX United Kingdom  
Telephone no.: +44 (0) 191 4106611  
Fax no.: +44 (0) 191 4920125  
enquiries@tor-coatings.com

**e-mail address of person responsible for this SDS** : rpmeurohas@rustoleum.eu

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

Telephone number Belgium : Poison centre: +32(0)70 245 245  
Telephone number Bulgaria : +359 2 9154 409  
Telephone number Croatia : +385 1 2348 342  
Telephone number Cyprus : 1401  
Telephone number Denmark : Contact the "Giftlinien" on tel. No. 82 12 12 12 (open 24 hours a day).  
See point 4 on first aid.  
Telephone number Estonia : 16662  
Telephone number Finland : 0800 147 111  
Telephone number France : ORFILA (INRS): +33 (0)1 45 42 59 59 (24/7)  
Telephone number Greece : Emergency Telephone Poison Center Nos. Children Aglaia Kyriakou  
+30 210 7793777

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

Telephone number Hungary	: Health Toxicology Information Service (ETTSZ) (+ 36-80) 201-199 (in case of emergency 0-24 h, can be called free of charge).
Telephone number Iceland	: +354 5432222
Telephone number Ireland	: 809 2166 Available 8am to 10pm 7 days per week
Telephone number Italy	: 800183459
Telephone number Latvia	: Toxicology and sepsis clinics Poisoning and Drug Information Center, Hipokrāta Street 2, Riga, Latvia, LV-1038, Phone number: +371 67042473
Telephone number Lithuania	: Poison Information Office 24 hours a day: Phone: +370 (5) 2362052 (www.apsinuodijau.lt/)
Telephone number Luxembourg	: Poison centre: +32(0)70 245 245
Telephone number Malta	: 112
Telephone number Netherlands	: 088-755 8000
Telephone number Norway	: +47 22 59 13 00
Telephone number Portugal	: 112 24/7, free call 800 250 250
Telephone number Romania	: +40 21 318 36 06 ( Monday - Friday between 8:00 -15:00, local hour)
Telephone number Slovakia	: NATIONAL TOXICOLOGICAL INFORMATION CENTER - Non-stop 24-hour consultation in case of acute intoxication +421 2 5477 4166
Telephone number Spain	: 915 620 420
Telephone number Sweden	: Poison Information Center: 112
Telephone number Switzerland	: Swiss Toxicological Information Centre (24 h) : 145
Telephone number United Kingdom: Northern Ireland	: 809 2166 Available 8am to 10pm 7 days per week

### Supplier

Telephone number Austria	: +43 13649237
Telephone number Belgium	: +32 28083237
Telephone number Bulgaria	: +359 32570104
Telephone number Croatia	: +385 17776920
Telephone number Czech Republic	: +420 228880039
Telephone number Denmark	: +45 69918573
Telephone number Estonia	: +372 6681294
Telephone number Finland	: +358 942419014
Telephone number France	: +33 975181407
Telephone number Germany	: +49 69643508409 / 0800-181-7059
Telephone number Greece	: +30 2111768478
Telephone number Hungary	: +36 18088425
Telephone number Iceland	: +354 539 0655
Telephone number Ireland	: +353 19014670
Telephone number Italy	: +39 0245557031 / 800-789-767
Telephone number Latvia	: +371 66165504
Telephone number Lithuania	: +370 52140238
Telephone number Luxembourg	: 352-20202416
Telephone number Netherlands	: +31 858880596
Telephone number Poland	: +48 223988029
Telephone number Portugal	: +351 308801773

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

Telephone number Romania : +40 37 6300026  
 Telephone number Slovakia : +421 233057972  
 Telephone number Slovenia : +38 618888016  
 Telephone number Spain : +34 931768545  
 Telephone number Sweden : +46 852503403  
 Telephone number Switzerland : +41 435082011  
 Hours of operation : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Eye Irrit. 2, H319

Skin Sens. 1, H317

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : H317 - May cause an allergic skin reaction.  
 H319 - Causes serious eye irritation.  
 H412 - Harmful to aquatic life with long lasting effects.

### Precautionary statements

**General** : Not applicable.

**Prevention** : P280 - Wear protective gloves. Wear eye or face protection.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Octene, hydroformylation products, high-boiling  
 1,2-benzisothiazol-3(2H)-one  
 2-octyl-2H-isothiazol-3-one  
 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and  
 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

**Supplemental label elements** : EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed.  
 Do not breathe spray or mist.

**Supplemental label elements : Detergents -** : Not applicable.

**Regulation (EC) No 907/2006**

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SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Europe

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
2-Propenoic acid, polymer with butyl 2-propenoate, ammonium salt	CAS: 57167-10-9	≤3	Eye Dam. 1, H318	-	[1]
2-(2-butoxyethoxy)ethanol	REACH #: 01-2119475104-44 EC: 203-961-6 CAS: 112-34-5	≤3	Eye Irrit. 2, H319	-	[1] [2]
Alkanes, iso-, C11-13	REACH #: 01-2119456810-40 EC: 920-901-0 Index: 920-901-0	≤3	Asp. Tox. 1, H304 EUH066	-	[1]
hydrocarbons, C11-C12, iso-alkanes, <2% aromatics	REACH #: 01-2119472146-39 EC: 918-167-1	≤3	Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH066	-	[1]
Octene, hydroformylation products, high-boiling	REACH #: 01-2119486463-31 EC: 271-237-7 CAS: 68526-89-6	≤0,3	Skin Sens. 1B, H317	-	[1]
2-octyl-2H-isothiazol-3-one	EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	≤0,3	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330	ATE [Oral] = 125 mg/kg ATE [Dermal] = 311 mg/kg ATE [Inhalation (dusts and mists)] = 0,27 mg/l	[1]
1,2-benzisothiazol-3(2H)-	REACH #:	≤0,1	Acute Tox. 4, H302	ATE [Oral] = 450	[1]

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### SECTION 3: Composition/information on ingredients

one	01-2120761540-60 EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6		Acute Tox. 2, H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	mg/kg ATE [Inhalation (dusts and mists)] = 0,21 mg/l Skin Sens. 1, H317: C ≥ 0,036% M [Acute] = 1 M [Chronic] = 1	
2-octyl-2H-isothiazol-3-one	REACH #: 17-2119390467-28 EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	≤0,1	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 125 mg/kg ATE [Dermal] = 311 mg/kg ATE [Inhalation (dusts and mists)] = 0,27 mg/l Skin Sens. 1, H317: C ≥ 0,0015% M [Acute] = 100 M [Chronic] = 100	[1]
pyrithione zinc	REACH #: 01-2119511196-46 EC: 236-671-3 CAS: 13463-41-7	≤0,1	Acute Tox. 3, H301 Acute Tox. 2, H330 Eye Dam. 1, H318 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 221 mg/kg ATE [Inhalation (dusts and mists)] = 0,14 mg/l M [Acute] = 1000 M [Chronic] = 10	[1]
terbutryn	EC: 212-950-5 CAS: 886-50-0	≤0,1	Acute Tox. 4, H302 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 100 M [Chronic] = 100	[1]
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	REACH #: 01-2120764691-48 CAS: 55965-84-9 Index: 613-167-00-5 List #: 611-341-5	≤0,1	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410  <b>See Section 16 for the full text of the H statements declared above.</b>	ATE [Oral] = 64 mg/kg ATE [Dermal] = 92,4 mg/kg ATE [Inhalation (dusts and mists)] = 0,171 mg/l Skin Corr. 1B, H314: C ≥ 0,6% Skin Irrit. 2, H315: 0,06% ≤ C < 0,6% Eye Dam. 1, H318: C ≥ 0,6% Eye Irrit. 2, H319: 0,06% ≤ C < 0,6% Skin Sens. 1, H317: C ≥ 0,0015% M [Acute] = 100 M [Chronic] = 100	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

## SECTION 3: Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

List numbers have no legal significance.

This mixture contains  $\geq 1\%$  of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- |                                   |  |
|-----------------------------------|--|
| <b>Eye contact</b>                | : 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.  |
| <b>Inhalation</b>                 | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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. 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. |
| <b>Skin contact</b>               | : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.  |
| <b>Ingestion</b>                  | : 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 adverse health effects persist or are severe. 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.                                   |
| <b>Protection of first-aiders</b> | : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.  |

### 4.2 Most important symptoms and effects, both acute and delayed

#### Over-exposure signs/symptoms

- |                     |  |
|---------------------|--|
| <b>Eye contact</b>  | : Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness |
| <b>Inhalation</b>   | : No specific data.  |
| <b>Skin contact</b> | : Adverse symptoms may include the following:<br>irritation<br>redness                     |
| <b>Ingestion</b>    | : No specific data.  |

### 4.3 Indication of any immediate medical attention and special treatment needed

## SECTION 4: First aid measures

- 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.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
metal oxide/oxides

### 5.3 Advice for firefighters

- 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

### 6.1 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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised 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".

### 6.2 Environmental precautions

- : Avoid dispersal of spilt 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.

### 6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.



## SECTION 6: Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.

### 7.2 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

[Occupational exposure limits / Biological exposure indices](#)  
[Europe](#)



**SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Exposure limit values
2-(2-butoxyethoxy)ethanol	<b>EU OEL (Europe, 10/2019). Notes: list of indicative occupational exposure limit values</b> TWA: 67,5 mg/m <sup>3</sup> 8 hours. TWA: 10 ppm 8 hours. STEL: 101,2 mg/m <sup>3</sup> 15 minutes. STEL: 15 ppm 15 minutes.

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following:  
 European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
2-(2-butoxyethoxy)ethanol	DNEL	Long term Inhalation	67,5 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	50,6 mg/m <sup>3</sup>	General population [Consumers]	Local
	DNEL	Long term Inhalation	34 mg/m <sup>3</sup>	General population [Consumers]	Local
	DNEL	Long term Dermal	10 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	67,5 mg/m <sup>3</sup>	Workers	Systemic
Octene, hydroformylation products, high-boiling	DNEL	Long term Oral	25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	50 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	87 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	116,7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	411,4 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	6,81 mg/m <sup>3</sup>	Workers	Systemic
1,2-benzisothiazol-3(2H)-one	DNEL	Long term Inhalation	1,2 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	0,966 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0,345 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0,02 mg/m <sup>3</sup>	Workers	Local
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	DNEL	Short term Inhalation	0,04 mg/m <sup>3</sup>	Workers	Local

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## SECTION 8: Exposure controls/personal protection

	DNEL	Long term Inhalation	0,02 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	0,04 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Oral	0,09 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0,11 mg/kg bw/day	General population	Systemic

### PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2-(2-butoxyethoxy)ethanol	Fresh water	1,1 mg/l	Assessment Factors
	Marine	0,11 mg/l	-
	Fresh water sediment	4,4 mg/kg	Equilibrium Partitioning
	Marine water sediment	0,44 mg/kg	Equilibrium Partitioning
	Sewage Treatment Plant	200 mg/l	Assessment Factors
Octene, hydroformylation products, high-boiling	Soil	0,32 mg/kg	Equilibrium Partitioning
	Secondary Poisoning	56 mg/kg	Assessment Factors
	Fresh water	0,1 mg/l	-
	Marine water	0,01 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
1,2-benzisothiazol-3(2H)-one	Fresh water sediment	4000 mg/kg	-
	Marine water sediment	400 mg/kg	-
	Soil	1,25 mg/kg	-
	Fresh water	0,00403 mg/l	-
	Marine water	0,000403 mg/l	-
pyrithione zinc	Sewage Treatment Plant	1,03 mg/l	-
	Fresh water sediment	0,0499 mg/kg dwt	-
	Marine water sediment	0,00499 mg/kg dwt	-
	Soil	3 mg/kg dwt	-
	Fresh water	0,00009 mg/l	-
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Marine water	0,00009 mg/l	-
	Sewage Treatment Plant	0,01 mg/l	-
	Marine water sediment	0,0095 mg/kg	-
	Fresh water sediment	0,0095 mg/kg	-
	Fresh water	3,39 ng/l	-
	Sewage Treatment Plant	0,23 mg/l	-
	Marine water	3,39 ng/l	-
	Soil	0,01 mg/kg dwt	-
	Fresh water sediment	0,027 mg/kg dwt	-
	Marine water sediment	0,027 mg/kg dwt	-
	Fresh water	0,00339 mg/l	-
	Marine water	0,00339 mg/l	-
	Sewage Treatment Plant	0,23 mg/l	-
	Fresh water sediment	0,027 mg/kg	-
	Marine water sediment	0,027 mg/kg	-
	Soil	0,01 mg/kg	-

## 8.2 Exposure controls

## SECTION 8: Exposure controls/personal protection

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### 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. Contaminated work clothing should not be allowed out of the workplace. 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. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**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. > 8 hours (breakthrough time): nitrile rubber (0.5mm)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**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. Recommended: Wear overalls or long sleeved shirt. (EN 467)

**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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (EN 141).

**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.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Physical state	: Liquid.
Colour	: Various
Odour	: Ammoniacal.
Odour threshold	: Not available.
Melting point/freezing point	: 0°C [Literature]
Initial boiling point and boiling range	: >100°C (>212°F) [Literature]
Flammability (solid, gas)	: Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. Non-flammable but will burn on prolonged exposure to flame or high temperature.
Lower and upper explosion limit	: Not available.
Flash point	: Not relevant due to nature of the product.
Auto-ignition temperature	: Not relevant due to nature of the product.
Decomposition temperature	: Not available.
pH	: 8 to 9 [Conc. (% w/w): 100%] [OECD 122]
pH : Justification	: Not available.
Viscosity	: Dynamic (room temperature): 8000 to 9000 mPa·s [ISO EN BS DIN 3219] Kinematic (room temperature): 6201 to 7317 mm²/s [calculated.] Kinematic (40°C): >20,5 mm²/s [calculated.]
Solubility(ies)	:
Media	Result
cold water	Soluble
hot water	Soluble
methanol	Very slightly soluble
acetone	Very slightly soluble
Solubility in water	: Not available.
Partition coefficient: n-octanol/ water	: Not applicable.
Vapour pressure	: 2,3 kPa (17,25 mm Hg) [Literature]
Evaporation rate	: <1 (butyl acetate = 1)
Relative density	: Not available.
Density	: 1,23 to 1,29 g/cm³ [20°C (68°F)] [DIN 53217]
Vapour density	: >1 [Air = 1]
Explosive properties	: Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. No unusual hazard if involved in a fire.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

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SECTION 10: Stability and reactivity

- 10.1 Reactivity: No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability: The product is stable.
- 10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid: No specific data.
- 10.5 Incompatible materials: No specific data.
- 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-(2-butoxyethoxy)ethanol	LC50 Inhalation Vapour	Rat	58 mg/l	4 hours
	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Mouse	2400 mg/kg	-
	LD50 Oral	Mouse - Male	2410 mg/kg	-
	LD50 Oral	Rat	3305 mg/kg	-
2-octyl-2H-isothiazol-3-one	LC50 Inhalation Dusts and mists	Rat	0,27 mg/l	4 hours
	LD50 Dermal	Rabbit	311 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	248 mg/kg	-
1,2-benzisothiazol-3(2H)-one	LC50 Inhalation Dusts and mists	Rat	0,11 mg/l	4 hours
	LC50 Inhalation Dusts and mists	Rat - Male, Female	0,5 mg/l	4 hours
	LD50 Oral	Rat - Male	490 mg/kg	-
2-octyl-2H-isothiazol-3-one	LC50 Inhalation Dusts and mists	Rat	0,27 mg/l	4 hours
	LD50 Oral	Rat	248 mg/kg	-
pyrithione zinc	LC50 Inhalation Dusts and mists	Rat	140 mg/m³	4 hours
	LD50 Dermal	Rabbit	100 mg/kg	-
terbutryn	LD50 Oral	Rat	177 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>2200 mg/l	4 hours
	LD50 Dermal	Rabbit	>10200 mg/kg	-
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	LD50 Oral	Rat	2045 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat - Male, Female	0,171 mg/l	4 hours
	LD50 Dermal	Rabbit	92,4 mg/kg	-
	LD50 Oral	Rat	64 mg/kg	-

Conclusion/Summary: Based on available data, the classification criteria are not met.

Acute toxicity estimates

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SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
2-(2-butoxyethoxy)ethanol	3305	2700	N/A	58	N/A
2-octyl-2H-isothiazol-3-one	125	311	N/A	N/A	0,27
1,2-benzisothiazol-3(2H)-one	450	N/A	N/A	N/A	0,21
2-octyl-2H-isothiazol-3-one	125	311	N/A	N/A	0,27
pyrithione zinc	221	N/A	N/A	N/A	0,14
terbutryn	500	N/A	N/A	N/A	N/A
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	64	92,4	N/A	N/A	0,171

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-octyl-2H-isothiazol-3-one	Eyes - Severe irritant	Rabbit	-	-	-
terbutryn	Eyes - Moderate irritant	Rabbit	-	76 milligrams	-
	Skin - Mild irritant	Rabbit	-	380 milligrams	-
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Severe irritant	Human	-	0.01 Percent	-
	Skin - Severe irritant	Rabbit	-	-	1 to 4 hours

Conclusion/Summary

- Skin

: Based on available data, the classification criteria are not met.
- Eyes

: Causes serious eye irritation.
- Respiratory

: Based on available data, the classification criteria are not met.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
1,2-benzisothiazol-3(2H)-one	skin	Guinea pig	Sensitising
2-octyl-2H-isothiazol-3-one	skin	Rat	Sensitising
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	skin	Guinea pig	Sensitising

Conclusion/Summary

- Skin

: May cause an allergic skin reaction.
- Respiratory

: Based on available data, the classification criteria are not met.

Mutagenicity

- Conclusion/Summary

: Based on available data, the classification criteria are not met.

Carcinogenicity

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

- Conclusion/Summary

: Based on available data, the classification criteria are not met.

Reproductive toxicity

- Conclusion/Summary

: Based on available data, the classification criteria are not met.

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SECTION 11: Toxicological information

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
pyrithione zinc	Category 1	-	-

Aspiration hazard

Product/ingredient name	Result
Alkanes, iso-, C11-13	ASPIRATION HAZARD - Category 1
hydrocarbons, C11-C12, iso-alkanes, <2% aromatics	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure : Routes of entry anticipated: Oral, Inhalation, Eyes.  
Routes of entry not anticipated: Dermal.

Potential acute health effects

Eye contact : Causes serious eye irritation.  
Inhalation : No known significant effects or critical hazards.  
Skin contact : May cause an allergic skin reaction.  
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness  
Inhalation : No specific data.  
Skin contact : Adverse symptoms may include the following:  
irritation  
redness  
Ingestion : No specific data.

Delayed and immediate effects as well as 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

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.  
General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
Carcinogenicity : No known significant effects or critical hazards.  
Mutagenicity : No known significant effects or critical hazards.



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**SECTION 11: Toxicological information****Reproductive toxicity** : No known significant effects or critical hazards.**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Not available.

**11.2.2 Other information**

Not available.

**SECTION 12: Ecological information****12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
2-(2-butoxyethoxy)ethanol	Acute EC10 1995 mg/l Fresh water	Micro-organism	30 minutes
	Acute EC50 3300 mg/l Fresh water	Daphnia spec.	24 hours
	Acute EC50 1101 mg/l Fresh water	Daphnia spec.	48 hours
	Acute EC50 2850 mg/l	Daphnia spec.	48 hours
	Acute EC50 1300 mg/l Fresh water	Fish	96 hours
	Acute NOEC >100 mg/l	Algae	96 hours
	Chronic EC10 112 mg/l	Daphnia spec.	14 days
	Acute EC50 0,11 mg/l	Algae	72 hours
	Acute EC50 0,067 mg/l	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours
	Acute EC50 0,9893 mg/l Marine water	Crustaceans - <i>Opossum Shrimp</i>	96 hours
1,2-benzisothiazol-3(2H)-one	Acute EC50 2,94 mg/l Fresh water	Daphnia spec.	48 hours
	Acute LC50 2,18 mg/l Fresh water	Fish	96 hours
	Acute LC50 8 to 13 mg/l	Fish - <i>Alburnus alburnus</i>	96 hours
	Acute LC50 1,6 to 2,8 ppm Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Chronic NOEC 90 mg/l	Aquatic plants - <i>Phaseolus vulgaris</i>	20 days
	Chronic NOEC 1,2 mg/l	Daphnia spec.	21 days
	Chronic NOEC 0,21 mg/l	Fish	28 days
	Chronic NOEL 0,0403 mg/l	Algae	72 hours
	Acute EC50 0,32 to 0,834 mg/l Fresh water	Daphnia spec. - <i>Daphnia magna</i>	48 hours
	Acute IC50 0,084 mg/l	Algae	72 hours
2-octyl-2H-isothiazol-3-one	Acute LC50 0,0655 to 0,104 mg/l Fresh water	Fish	96 hours
	Acute LC50 0,14 to 0,202 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute EC50 0,51 µg/l Marine water	Algae - <i>Thalassiosira pseudonana</i>	96 hours
	Acute EC50 80 µg/l Fresh water	Crustaceans - <i>Chydorus sphaericus</i>	48 hours
	Acute EC50 38 µg/l Fresh water	Crustaceans - <i>Ilyocypris dentifera</i>	48 hours
	Acute EC50 8,25 ppb Fresh water	Daphnia spec. - <i>Daphnia magna</i>	48 hours
	Acute EC50 61 µg/l Fresh water	Daphnia spec. - <i>Daphnia magna</i> - Nauplii	48 hours
	Acute LC50 2,68 ppb Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Chronic EC10 0,36 µg/l Marine water	Algae - <i>Thalassiosira pseudonana</i>	96 hours
	Chronic NOEC 2,7 ppb Marine water	Daphnia spec. - <i>Daphnia magna</i>	21 days
pyrithione zinc	Acute EC50 0,1 µg/l Fresh water	Algae - <i>Fragilaria capucina ssp. rumpens</i>	96 hours
	Acute EC50 2 µg/l Fresh water	Algae - <i>Pseudokirchneriella subcapitata</i>	72 hours
	Acute EC50 2,66 ppm Fresh water	Daphnia spec. - <i>Daphnia magna</i>	48 hours
	Acute IC50 0,0055 mg/l	Algae	72 hours
	Acute LC50 579,3 mg/l Fresh water	Crustaceans - <i>Pacifastacus leniusculus</i> - Juvenile (Fledgling,	48 hours
terbutryn			

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SECTION 12: Ecological information

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Acute LC50 1,8 to 1400 µg/l Fresh water	Hatchling, Weanling) Fish - <i>Carassius carassius</i>	96 hours
	Acute LC50 0,82 ppm Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Chronic EC10 0,015 µg/l Fresh water	Algae - <i>Fragilaria capucina ssp. rumpens</i>	96 hours
	Acute EC50 0,037 mg/l Fresh water	Algae	48 hours
	Acute EC50 0,16 mg/l Fresh water	Daphnia spec.	48 hours
	Acute LC50 0,19 mg/l Fresh water	Fish	96 hours
	Acute NOEC 0,004 mg/l Marine water	Algae	48 hours
	Chronic NOEC 0,18 mg/l	Daphnia spec.	21 days
	Chronic NOEC 0,02 mg/l Fresh water	Fish	38 days

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
1,2-benzisothiazol-3(2H)-one 2-octyl-2H-isothiazol-3-one  reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	OECD 303A	>90 % - Readily - 1 days	-	-
	OECD 303A	>80 % - Readily - 4 days	-	-
	OECD 309	90 % - Readily - 4 days	0,01 to 0,1 mg/l	-
	OECD 309	50 % - Readily - 2 days	0,01 to 0,1 mg/l	-
	OECD 301D	>60 % - Readily - 28 days	-	-
	-	<50 % - 10 days	-	-
	-	-	-	-

Conclusion/Summary : This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-(2-butoxyethoxy)ethanol hydrocarbons, C11-C12, iso-alkanes, <2% aromatics 2-octyl-2H-isothiazol-3-one 1,2-benzisothiazol-3(2H)-one 2-octyl-2H-isothiazol-3-one reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	-	-	Readily
	-	-	Inherent
	-	-	Readily
	-	-	Readily
	Fresh water 2 days, 20°C	-	Readily
	-	-	Readily
	-	-	Readily

12.3 Bioaccumulative potential

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SECTION 12: Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-(2-butoxyethoxy)ethanol	1	-	Low
Octene, hydroformylation products, high-boiling	>3.8	-	High
2-octyl-2H-isothiazol-3-one	2,9	-	Low
1,2-benzisothiazol-3(2H)-one	0,64	-	Low
2-octyl-2H-isothiazol-3-one	2,9	-	Low
pyrithione zinc	0,9	11	Low
terbutryn	3,74	-	Low
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	-0.83 to 0.75	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Mobility : Nonvolatile liquid.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised 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.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances

Special precautions : 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
Decamethylcyclopentasiloxane	≤0,1	70

Labelling : Not applicable.

Other EU regulations

VOC :

VOC for Ready-for-Use Mixture : 2004/42/EC - IIA/c: 40g/l (2010). ≤= 15g/l VOC.

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

## SECTION 15: Regulatory information

**Explosive precursors** : Not applicable.

### Ozone depleting substances (1005/2009/EC)

Not listed.

### Prior Informed Consent (PIC) (649/2012/EC)

Not listed.

### Persistent Organic Pollutants (850/2004/EC)

Not listed.

### Seveso Directive

This product is not controlled under the Seveso Directive.

### National regulations

#### Austria

**VbF class** : Not regulated.

**Storage code** : LGK12

**Classification, packaging and labelling** : Not available.

**Limitation of the use of organic solvents** : Permitted.

**Waste catalogue** : 55513

**References** : Federal Law Gazette Nr. 240/1991 - Regulation on Combustible liquids - Warning Classes  
Ministry of the Economy and Labor 2003 - GKV 2003 - Decree 429/2011  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

#### Belgium

**References** : Royal Decree of 2 December 1993 concerning the protection of workers against the risks related to exposure to carcinogens and mutagens at work  
Royal Decree 374/2001, protection of the health and safety of workers from the risks related to chemical agents at work  
Royal Decree 396/2006, which establishes minimum health and safety requirements for the protection of workers from risk of exposure to asbestos at the workplace.  
Royal Decree of 17 May 2007, amending the Royal Decree of 11 March 2002 relating to the protection of the health and the safety of workers against the risks related to chemical agents in the workplace, Belgium State Gazette 2007-2327 of 7 June 2007.  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

#### Bulgaria

**References** : Ordinance No. 9 of 4 August 2006 on the protection of workers from the risks related to exposure to asbestos at work  
Ordinance No. 13 of 30 December 2003 on the protection of workers from the risks related to exposure to chemical agents at work  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

#### Croatia

## SECTION 15: Regulatory information

**References** : Regulation about Maximum Exposure Limits of harmful substances in the atmosphere of the working environment NN 92/93  
Regulation about application of personal safety equipment NN 39/06  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Cyprus

**References** : -

### Czech Republic

**Storage code** : IV

**References** : Decree of the government no. 441/2004 Sb., which amends Decree of the government no. 178/2001 Sb., which implements the health and safety at work conditions, according to the Decree of the government no. 523/2002 Sb.  
Decree of the government no. 194/2001 Sb., which implements the technical requirements for aerosol dispensers

REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Denmark

**Product registration number** : 4043228  
PCN

**Danish fire class** : Not available.

**Denmark – Cancer risks** : Not listed

**MAL-code** : 00-1

**Protection based on MAL** : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

**General:** Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

MAL-code: 00-1

**Application:** When spraying in existing\* spray booths, if the operator is outside the spray zone.

- Arm protectors must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Full mask with combined filter, coveralls and hood must be worn.

## SECTION 15: Regulatory information

**Drying:** Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

**Polishing:** When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

**Caution** The regulations contain other stipulations in addition to the above.

\*See Regulations.

**MAL-code for ready-for-use mixture** : Not available.

**Protection based on MAL for ready-for-use mixture** : Not available.

Not available.

Not available.

**Low-boiling liquids** : Not applicable.

**Restrictions on use** : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

**Statutory Order 517 on Aerosols** : Not applicable.

**List of undesirable substances** : Not listed

**Carcinogenic waste** : Not applicable.

**Waste card number** : 03.21

**Waste group** : H

**Remark** : Not available.

**References** : Executive Order no. 301 of 13 May 1993 "Executive order on the determination of code numbers". (MAL code)  
Executive Order no. 302 of 13 May 1993 "Executive Order on work with products with code numbers". (MAL code)  
Executive Order no. 559 of 4 July 2002 "Executive Order on special duties for manufacturers, suppliers and importers etc. of substances and materials according to the law on the working environment".  
Executive Order no. 908 of 27 September 2005 "Executive Order on measures for prevention of cancer risk when working with substances and materials".  
Executive Order no. 239 of 6 April 2005 "Executive Order on young people's work".  
Danish Working Environment Authority Guidance No. C.0.1. of August 2007 "Trace limit value list for substances and materials".  
Executive Order no. 571 of 29 November 1984 "Executive Order on use of propellants and solvents in aerosol containers".  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

[Estonia](#)



## SECTION 15: Regulatory information

**References** : Regulation of the Estonian Government of 02.02.2000 No. 32 Occupational health and occupational safety requirements for asbestos.  
 Regulation of the Estonian Government of 15.12.2005 No. 309 Occupational health and occupational safety requirements for carcinogenic and mutagenic substances.  
 Regulation of the Estonian Government of 18.09.2001 No. 293 Occupational exposure limits of chemicals.  
 Regulation of the Estonian Government of 20.03.2001 No. 105 Occupational health and occupational safety requirements for handling dangerous chemicals and materials.  
 Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
 REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Finland

**NACE** : Not available.

**UC62** : Not available.

**References** : Regulation of the Ministry of Social Affairs and Health on occupational exposure limit values 795/2007  
 Aerosol regulation amendment 805/1994  
 Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### France

**Social Security Code, Articles L 461-1 to L 461-7** : 2-(2-butoxyethoxy)ethanol RG 84

**Classified installations for environmental protection** : Not available.

**Reinforced medical surveillance** : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

**Remark** : Not available.

**References** : Tables of anticipated professional diseases according to article R461-3 of the labour code  
 Labour code: Regulatory and recommended occupational exposure limits: Art. R231-55 to Art. R231-55-3.  
 Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### Germany

**Storage class (TRGS 510)** : 12

### Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

### Named substances

Name	Reference number

### Danger criteria

Category	Reference number

**Hazard class for water** : 1

## SECTION 15: Regulatory information

- Technical instruction on air quality control** : TA-Luft Number 5.2.5: 8,5%  
TA-Luft Class I - Number 5.2.5: 0,1%
- AOX** : The product contains organically bound halogens and can contribute to the AOX value in waste water.
- References** : Decree No. 44/2000 (XII.27.) EüM of the Ministry of Health on detailed arrangements for certain procedures, activities relating to dangerous substances and dangerous preparations plus amendments  
Decree No. 25/2000 (IX.30.) EüM of the Ministry of Health on chemical safety at work plus amendments  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### Greece

- References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878

### Hungary

- References** : Regulation on the restrictions on the marketing and use of certain dangerous substances, preparations and articles according to the Chemicals Law  
Technical Rules for Hazardous Substances (TRGS): Occupational Exposure Limits (TRGS 900)  
Technical Rules for Hazardous Substances (TRGS): Directory of carcinogenic, mutagenic and reprotoxic substances (TRGS 905)  
First General Administrative Regulation Pertaining to the Federal Immission Control Act (Technical Instructions on Air Quality Control – TA Luft)  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### Ireland

- References** : Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001)  
Safety, Health and Welfare at Work (Carcinogens) Regulations 2001 (S.I. No. 78 of 2001)  
Safety, Health and Welfare at Work (General Application) Regulations 2007  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Italy

- D.Lgs. 152/06** : Not determined.

- References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878

### Latvia

- References** : Regulation of Cabinet of Ministers No. 325 of 15 May 2007 "Labour protection requirements for contact with chemical substances in the workplace"  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### Lithuania

## SECTION 15: Regulatory information

**References** : Regulation about Maximum Exposure Limits of harmful substances in the atmosphere of the working environment NN 92/93  
Regulation about application of personal safety equipment NN 39/06  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### Luxembourg

**References** : -

### Malta

**References** : -

### Netherlands

**Water Discharge Policy (ABM)** : A(3) Hazardous for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

**Remark** : Not available.

**References** : Water Discharge Policy (ABM)  
Netherlands Emission Guidelines for Air (NeR)  
List of carcinogenic substances and processes according to article 4.11 of the Working Conditions Act; Health and Safety Act  
List of mutagenic substances and processes according to article 4.11 of the Working Conditions Act; Health and Safety Act  
Non-limited list of reprotoxic substances (with additional registration requirement) according to article 4..2a(2) of the Working Conditions Act; Health and Safety Act  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Poland

**References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Portugal

**References** : Occupational Health and Safety. Professional exposure limit values for chemical agents (NP 1796 2007)  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Romania

**References** : Order 595-2002 approving technical Regulations regarding spray aerosol containers  
Governmental Decision 1218-2006 on establishing the minimum requirements of labour safety and health for ensuring the protection of workers against risks connected to the presence of chemical agents  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Slovakia

## SECTION 15: Regulatory information

**References** : Government regulation no. 45/2002 Consolidated to 16 January 2002 on the protection of health at work from chemical agents  
Government Regulation 301/2007 on the protection of workers from risks associated with exposure to carcinogenic and mutagenic factors  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Slovenia

**References** : Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Spain

**References** : Royal Decree 374/2001, protection of the health and safety of workers from the risks related to chemical agents at work  
ROYAL DECREE 2549/1994. Regulation on aerosol dispensers  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

### Sweden

**Ordinance on Thermoset Plastics** : Not applicable.

**Thermoset plastic waste** : Not available.

**Waste group** : 080115\*

**Flammable liquid class (SRVFS 2005:10)** : Not applicable.

**References** : Thermosetting plastics AFS 2005:18  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878  
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### International regulations

#### Stockholm Convention on Persistent Organic Pollutants

List name	Ingredient name	Status
Not listed.		

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

List name	Ingredient name	Status
Not listed.		

**CN code** : 3209 10 00 00

### Inventory list

**Australia** : At least one component is not listed.  
**Canada** : At least one component is not listed.  
**China** : Not determined.  
**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

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SECTION 15: Regulatory information

Japan	: Japan inventory (CSCL): At least one component is not listed. Japan inventory (ISHL): At least one component is not listed.
New Zealand	: At least one component is not listed.
Philippines	: At least one component is not listed.
Republic of Korea	: At least one component is not listed.
Taiwan	: At least one component is not listed.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments are still required.
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SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative
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Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	Expert judgment Expert judgment Expert judgment

Full text of abbreviated H statements

Europe

Full text of abbreviated H statements	: <table><tr><td>H226</td><td>Flammable liquid and vapour.</td></tr><tr><td>H301</td><td>Toxic if swallowed.</td></tr><tr><td>H302</td><td>Harmful if swallowed.</td></tr><tr><td>H304</td><td>May be fatal if swallowed and enters airways.</td></tr><tr><td>H310</td><td>Fatal in contact with skin.</td></tr><tr><td>H311</td><td>Toxic in contact with skin.</td></tr><tr><td>H314</td><td>Causes severe skin burns and eye damage.</td></tr><tr><td>H315</td><td>Causes skin irritation.</td></tr><tr><td>H317</td><td>May cause an allergic skin reaction.</td></tr><tr><td>H318</td><td>Causes serious eye damage.</td></tr><tr><td>H319</td><td>Causes serious eye irritation.</td></tr><tr><td>H330</td><td>Fatal if inhaled.</td></tr><tr><td>H360D</td><td>May damage the unborn child.</td></tr><tr><td>H372</td><td>Causes damage to organs through prolonged or repeated exposure.</td></tr><tr><td>H400</td><td>Very toxic to aquatic life.</td></tr><tr><td>H410</td><td>Very toxic to aquatic life with long lasting effects.</td></tr><tr><td>H412</td><td>Harmful to aquatic life with long lasting effects.</td></tr><tr><td>EUH066</td><td>Repeated exposure may cause skin dryness or cracking.</td></tr><tr><td>EUH071</td><td>Corrosive to the respiratory tract.</td></tr></table>	H226	Flammable liquid and vapour.	H301	Toxic if swallowed.	H302	Harmful if swallowed.	H304	May be fatal if swallowed and enters airways.	H310	Fatal in contact with skin.	H311	Toxic in contact with skin.	H314	Causes severe skin burns and eye damage.	H315	Causes skin irritation.	H317	May cause an allergic skin reaction.	H318	Causes serious eye damage.	H319	Causes serious eye irritation.	H330	Fatal if inhaled.	H360D	May damage the unborn child.	H372	Causes damage to organs through prolonged or repeated exposure.	H400	Very toxic to aquatic life.	H410	Very toxic to aquatic life with long lasting effects.	H412	Harmful to aquatic life with long lasting effects.	EUH066	Repeated exposure may cause skin dryness or cracking.	EUH071	Corrosive to the respiratory tract.
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Metal / Cladding Topcoat

SECTION 16: Other information

<a href="#">Full text of classifications [CLP/GHS]</a>	:	Acute Tox. 2	ACUTE TOXICITY - Category 2
		Acute Tox. 3	ACUTE TOXICITY - Category 3
		Acute Tox. 4	ACUTE TOXICITY - Category 4
		Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
		Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
		Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
		Asp. Tox. 1	ASPIRATION HAZARD - Category 1
		Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
		Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
		Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
		Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
		Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
		Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
		Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
		Skin Sens. 1	SKIN SENSITISATION - Category 1
		Skin Sens. 1A	SKIN SENSITISATION - Category 1A
		Skin Sens. 1B	SKIN SENSITISATION - Category 1B
		STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

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Notice to reader

**IMPORTANT NOTE:** The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

**MANUFACTURER'S DISCLAIMER:** the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

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.