



# SAFETY DATA SHEET

5180 Epoxy Repair Mortar - hardener

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

### 1.1 Product identifier

**Product name** : 5180 Epoxy Repair Mortar - hardener  
**Product description** : repair product  
**Product type** : Liquid.  
**UFI** : 5520-S0SY-200R-CTNF

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

Identified uses	
Professional use Industrial 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 Czech Republic : Toxikologické informační středisko: Na Bojišti 1, 120 00 Praha 2, tel. +420 224 919 293 nebo +420 224 915 402 (nepřetržitá lékařská služba).  
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

## 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]

Skin Corr. 1, H314

Eye Dam. 1, H318

Skin Sens. 1, H317

Repr. 2, H361

STOT RE 1, H372

Aquatic Chronic 2, H411

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** : Danger

**Hazard statements** : H314 - Causes severe skin burns and eye damage.  
H317 - May cause an allergic skin reaction.  
H361 - Suspected of damaging fertility or the unborn child.  
H372 - Causes damage to organs through prolonged or repeated exposure.  
H411 - Toxic to aquatic life with long lasting effects.

#### Precautionary statements

**General** : Not applicable.

**Prevention** : P201 - Obtain special instructions before use.  
P280 - Wear protective gloves, protective clothing and eye or face protection.  
P273 - Avoid release to the environment.  
P260 - Do not breathe vapour.

**Response** : P391 - Collect spillage.  
P308 + P313 - IF exposed or concerned: Get medical advice or attention.  
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.  
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** : P405 - Store locked up.

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

## SECTION 2: Hazards identification

- Hazardous ingredients** : Fatty acids, tall oil, reaction products with tetraethylenepentamine  
Phenol, styrenated  
2-piperazin-1-ylethylamine  
tetraethylenepentamine
- Supplemental label elements** : EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed.  
Do not breathe spray or mist.
- Supplemental label elements : Detergents - Regulation (EC) No 907/2006** : Not applicable.
- 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
Fatty acids, tall oil, reaction products with tetraethylenepentamine	EC: 273-201-6 CAS: 68953-36-6	≥50 - ≤75	Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
Phenol, styrenated	REACH #: 01-2119980970-27 EC: 262-975-0 CAS: 61788-44-1	≥10 - ≤25	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
2-piperazin-1-ylethylamine	REACH #: 01-2119471486-30 EC: 205-411-0 CAS: 140-31-8 Index: 205-411-0	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412	ATE [Oral] = 1470 mg/kg ATE [Dermal] = 866 mg/kg	[1]
tetraethylenepentamine	REACH #: 01-2119487290-37	≤3	Acute Tox. 4, H302 Acute Tox. 4, H312	ATE [Oral] = 500 mg/kg	[1]

### SECTION 3: Composition/information on ingredients

	EC: 203-986-2 CAS: 112-57-2 Index: 612-060-00-0		Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411 <b>See Section 16 for the full text of the H statements declared above.</b>	ATE [Dermal] = 1100 mg/kg	
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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.

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

#### Type

[1] Substance classified with a health or environmental hazard

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

- Eye contact** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. 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.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## SECTION 4: First aid measures

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

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
stomach pains  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

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

- 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 toxic 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  
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.



## 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. Do not breathe 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. Collect spillage.

### 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.
- 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

- 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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. 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

## SECTION 7: Handling and storage

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. Store locked up. Separate from acids. 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.

### Seveso Directive - Reporting thresholds

#### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E2	200 tonne	500 tonne

### 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

**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

No DNELs/DMELs available.

#### PNECs

No PNECs available

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### 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.



## SECTION 8: Exposure controls/personal protection

**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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### **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

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: (EN 467) Overalls buttoned to the neck and wrist.

**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** : Grey.
- Odour** : Ammoniacal.
- Odour threshold** : Not available.
- Melting point/freezing point** : Not available.

## SECTION 9: Physical and chemical properties

<b>Initial boiling point and boiling range</b>	: Not relevant due to nature of the product.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosion limit</b>	: Not available.
<b>Flash point</b>	: Closed cup: >100°C (>212°F) [Literature]
<b>Auto-ignition temperature</b>	: Not relevant due to nature of the product.
<b>Decomposition temperature</b>	: Not available.
<b>pH</b>	: >11 [Literature]
<b>pH : Justification</b>	: Not available.
<b>Viscosity</b>	: Dynamic (room temperature): >450 mPa·s [Literature] Kinematic (room temperature): >419 mm <sup>2</sup> /s [calculated.] Kinematic (40°C): >20,5 mm <sup>2</sup> /s [calculated.]

### Solubility(ies)

Media	Result
cold water	Not soluble
hot water	Not soluble

<b>Solubility in water</b>	: Not available.
<b>Miscible with water</b>	: No.
<b>Partition coefficient: n-octanol/ water</b>	: Not applicable.
<b>Vapour pressure</b>	:

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
2-piperazin-1-ylethylamine	0,04	0,0053				
Phenol, styrenated	0,00075006	0,0001				

<b>Evaporation rate</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Density</b>	: 1,074 g/cm <sup>3</sup> [20°C (68°F)] [DIN 53217]
<b>Vapour density</b>	: Not available.
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: Reactive or incompatible with the following materials: acids

5180 Epoxy Repair Mortar - hardener

## SECTION 10: Stability and reactivity

**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
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
2-piperazin-1-ylethylamine	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rabbit	880 mg/kg	-
	LD50 Dermal	Rabbit	880 uL/kg	-
	LD50 Dermal	Rat	866 mg/kg	-
	LD50 Oral	Rat	1470 mg/kg	-
tetraethylenepentamine	LD50 Oral	Rat	2140 mg/kg	-
	LD50 Oral	Rat	2140 mg/kg	-

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

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
5180 Epoxy Repair Mortar - hardener	8658,8	6733,2	N/A	N/A	N/A
Phenol, styrenated	2500	N/A	N/A	N/A	N/A
2-piperazin-1-ylethylamine	1470	866	N/A	N/A	N/A
tetraethylenepentamine	500	1100	N/A	N/A	N/A

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phenol, styrenated	Eyes - Mild irritant	Rabbit	-	0.1 Milliliters	-
	Skin - Mild irritant	Rabbit	-	0.5 Milliliters	-
2-piperazin-1-ylethylamine	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
tetraethylenepentamine	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	5 milligrams	-
	Skin - Severe irritant	Rabbit	-	495 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 milligrams	-

**Skin** : Causes severe skin burns and eye damage.

**Eyes** : Causes serious eye damage.

**Respiratory** : Causes damage to organs through prolonged or repeated exposure.

#### Sensitisation

**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

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

#### Reproductive toxicity

## SECTION 11: Toxicological information

**Conclusion/Summary** : Suspected of damaging fertility or the unborn child.

### 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
2-piperazin-1-ylethylamine	Category 1	-	-

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes severe burns. 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  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
stomach pains  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

### 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.

5180 Epoxy Repair Mortar - hardener

## SECTION 11: Toxicological information

### Potential chronic health effects

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.
- General** : Causes damage to organs through prolonged or repeated exposure. 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.
- Reproductive toxicity** : Suspected of damaging fertility or the unborn child.

### 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-piperazin-1-ylethylamine	Acute LC50 2190000 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours

- Conclusion/Summary** : Toxic to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

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

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-piperazin-1-ylethylamine	-1,48	-	Low

### 12.4 Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.
- Mobility** : Non-volatile.

### 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
20 01 27*	paint, inks, adhesives and resins containing 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	UN2735	UN2735	UN2735	UN2735
<b>14.2 UN proper shipping name</b>	Polyamines, liquid, corrosive, N.O.S. (2-piperazin-1-ylethylamine)	Polyamines, liquid, corrosive, N.O.S. (2-piperazin-1-ylethylamine)	Polyamines, liquid, corrosive, N.O.S. (2-piperazin-1-ylethylamine). Marine pollutant	Polyamines, liquid, corrosive, N.O.S. (2-piperazin-1-ylethylamine)
<b>14.3 Transport hazard class(es)</b>	8  	8  	8  	8 
<b>14.4 Packing group</b>	III	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
<b>Additional information</b>	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <b>Limited quantity</b> 5L <b>Special provisions</b> 274 <b>Tunnel code</b> (E)	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <b>Special provisions</b> 274 <b>Remarks</b> : ≤ 5L: Limited Quantity	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <b>Emergency schedules</b> F-A, S-B <b>Special provisions</b> 223, 274 <b>IMDG Code</b> <b>Segregation group</b> SGG18 - Alkalis <b>Remarks</b> : ≤ 5L: Limited Quantity -	The environmentally hazardous substance mark may appear if required by other transportation regulations. <b>Quantity limitation</b> Passenger and Cargo Aircraft: 5 L. Packaging instructions: 852. Cargo Aircraft Only: 60 L. Packaging



5180 Epoxy Repair Mortar - hardener

## SECTION 14: Transport information

			IMDG 3.4	instructions: 856. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y841. <b>Special provisions</b> A3, A803
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**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]
5180 Epoxy Repair Mortar - hardener	≥90	3

**Labelling** : Not applicable.

#### Other EU regulations

**VOC for Ready-for-Use Mixture** : Exempt

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

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

**Explosive precursors** : Not applicable.

#### EU - Ozone depleting substances

Not listed.

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

Not listed.

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

Not listed.

#### Seveso Directive

This product is controlled under the Seveso Directive.

## SECTION 15: Regulatory information

### Danger criteria

#### Category

E2

### National regulations

#### Austria

- VbF class** : Not regulated.
- Storage code** : LGK 8B
- Classification, packaging and labelling** : Not available.
- Limitation of the use of organic solvents** : Permitted.
- Waste catalogue** : 55907
- 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

- 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

## SECTION 15: Regulatory information

**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 EC Regulation 1907/2006 (REACH), EC Regulation 1272/2008 (CLP), EC Regulation 648/2004 on detergents, Act No. 350/2011 Coll. on chemical substances and chemical mixtures, Act No. 185/2001 Coll. on waste, Decree No. 381/2001 Coll., Catalog of waste, Decree No. 383/2001 Coll., on details of waste management, Act No. 258/2000 Coll. on public health, Government Regulation No. 361/2007 Coll., establishing the conditions for health protection at work, Act No. 201/2012 Coll., on air protection and related decrees, Act No. 477/2001 Coll. on packaging, Decree No. 48/1982 Coll., which establishes basic requirements to ensure the safety of work and technical equipment, communication No. 8/2013 Coll. m.s. (ADR), notice No. 23/2013 Coll. (RID), Czech state standards 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

#### Executive Order No. 1795/2015

Ingredient name	Annex I Section A	Annex I Section B
titanium dioxide	Listed	-

**Product registration number** : 4038314

**Fire class** : IV-1

**Denmark – Cancer risks** : Listed

**MAL-code** : 00-6

**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: 00-6

**Application:** When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new\* booths and cabins with non-atomizing guns. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents. During non-atomising spraying in existing\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing\* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

## SECTION 15: Regulatory information

- Protective clothing must be worn.

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

- Air-supplied full mask and protective clothing 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.

- Air-supplied full mask, protective clothing and hood must be worn.

**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** : 00-5

**Protection based on MAL for ready-for-use mixture** : **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: 00-5

**Application:** When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new\* booths and cabins with non-atomizing guns. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents. During non-atomising spraying in existing\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When using scraper or knife, brush, roller, etc, for pre- and post-treatments in cabins or booths of the existing\* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Protective clothing must be worn.

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

## SECTION 15: Regulatory information

- Air-supplied full mask and protective clothing 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.

- Air-supplied full mask, protective clothing and hood must be worn.

**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.

<b>Low-boiling liquids</b>	: Not applicable.
<b>Restrictions on use</b>	: 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.
<b>List of undesirable substances</b>	: Not listed
<b>Carcinogenic waste</b>	: Waste containers must be labeled: Contains a substance or substances regulated by Danish working environment legislation on cancer risks.
<b>Waste card number</b>	: 05.99
<b>Waste group</b>	: H
<b>Remark</b>	: Not available.
<b>References</b>	: 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  
 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

### France

**Social Security Code, Articles L 461-1 to L 461-7** : 2-piperazin-1-ylethylamine (RG 49)

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

**Reinforced medical surveillance** : Decree n ° 2012-135 of January 30, 2012 relating to the organization of occupational medicine: 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  
 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

### Germany

**Storage class (TRGS 510)** : 8B

### Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

### Named substances

Name	Reference number

### Danger criteria

Category	Reference number
E2	1.3.2

**Hazard class for water** : 2



## SECTION 15: Regulatory information

### Technical instruction on air quality control (TA Luft)

Number [Class]	Description
5.2.1	Total dust
5.2.5	Organic substances
5.2.5 [I]	Organic substances

**AOX** : Not available.

**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  
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

### 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  
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

### 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  
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

## SECTION 15: Regulatory information

### Lithuania

- 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

### Luxembourg

- References** : -

### Malta

- References** : -

### Netherlands

- Water Discharge Policy (ABM)** : A(2) Toxic 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** : 20 01 27\*

**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  
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

### 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** : 3214 10 10 00

### Inventory list

- Australia** : All components are listed or exempted.
- Canada** : At least one component is not listed in DSL but all such components are listed in NDSL.
- China** : All components are listed or exempted.

## SECTION 15: Regulatory information

- Eurasian Economic Union** : Russian Federation inventory: Not determined.
- Japan** : Japan inventory (CSCL): All components are listed or exempted.  
Japan inventory (ISHL): Not determined.
- New Zealand** : All components are listed or exempted.
- Philippines** : All components are listed or exempted.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : All components are listed or exempted.
- 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.

## 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

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Corr. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data
Skin Sens. 1, H317	Calculation method
Repr. 2, H361	Calculation method
STOT RE 1, H372	Calculation method
Aquatic Chronic 2, H411	Calculation method

### Full text of abbreviated H statements

#### Europe

- Full text of abbreviated H statements** :
- |      |   |
|------|---|
| H302 | Harmful if swallowed.   |
| H311 | Toxic in contact with skin.                                     |
| H312 | Harmful 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.                                      |
| H361 | Suspected of damaging fertility or the unborn child.            |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects.                |
| H412 | Harmful to aquatic life with long lasting effects.              |

## SECTION 16: Other information

<a href="#">Full text of classifications [CLP/GHS]</a>	Acute Tox. 3	ACUTE TOXICITY - Category 3
	Acute Tox. 4	ACUTE TOXICITY - Category 4
	Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
	Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
	Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
	Repr. 2	REPRODUCTIVE TOXICITY - Category 2
	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
	STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

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### [Notice to reader](#)

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