



# SAFETY DATA SHEET

4901 Heavy-Duty Varnish - Gloss Activator

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

### 1.1 Product identifier

**Product name** : 4901 Heavy-Duty Varnish - Gloss Activator  
**Product description** : Hardener.  
**Product type** : Liquid.  
**UFI** : H4K0-X05T-100T-DA1F

### 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 :  
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	:
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 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	:
Telephone number United Kingdom: Northern Ireland	:

### 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 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 Malta	: -
Telephone number Netherlands	: +31 858880596
Telephone number Norway	: -
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  
 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]

Acute Tox. 4, H332  
 Skin Irrit. 2, H315  
 Eye Dam. 1, H318  
 Skin Sens. 1, H317  
 STOT SE 3, H335

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** : H315 - Causes skin irritation.  
 H317 - May cause an allergic skin reaction.  
 H318 - Causes serious eye damage.  
 H332 - Harmful if inhaled.  
 H335 - May cause respiratory irritation.

### Precautionary statements

**General** : Not applicable.

**Prevention** : P280 - Wear protective gloves. Wear eye or face protection.  
 P284 - In case of inadequate ventilation wear respiratory protection.  
 P271 - Use only outdoors or in a well-ventilated area.

**Response** : P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 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** : Not applicable.

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

**Hazardous ingredients** : Hexamethylene diisocyanate, oligomers  
 Poly(oxy-1,2-ethanediyl),  $\alpha$ -tridecyl- $\omega$ -hydroxy-, phosphate  
 hexamethylene-di-isocyanate

**Supplemental label elements** : EUH204 - Contains isocyanates. May produce an allergic reaction.

SECTION 2: Hazards identification

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
Hexamethylene diisocyanate, oligomers	REACH #: 01-2119485796-17 CAS: 28182-81-2 List #: 931-274-8	≥90	Acute Tox. 4, H332 Skin Sens. 1, H317 STOT SE 3, H335	ATE [Inhalation (dusts and mists)] = 1,5 mg/l	[1]
Poly(oxy-1,2-ethanediyl), α-tridecyl-ω-hydroxy-, phosphate	CAS: 9046-01-9	≤5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	-	[1]
phosphoric acid, butyl ester	EC: 235-826-2 CAS: 12788-93-1	≤3	Skin Corr. 1B, H314 Eye Dam. 1, H318	-	[1]
ethyldiisopropylamine	EC: 230-392-0 CAS: 7087-68-5	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	ATE [Oral] = 317 mg/kg	[1]
hexamethylene-di-isocyanate	REACH #: 01-2119457571-37 EC: 212-485-8 CAS: 822-06-0 Index: 615-011-00-1	≤0,1	Acute Tox. 4, H302 Acute Tox. 1, H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335	ATE [Oral] = 500 mg/kg ATE [Inhalation (vapours)] = 0,05 mg/l Resp. Sens. 1, H334: C ≥ 0,5% Skin Sens. 1, H317:	[1]

## SECTION 3: Composition/information on ingredients

			See Section 16 for the full text of the H statements declared above.	C ≥ 0,5%	
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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

List numbers have no legal significance.

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.

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

#### Over-exposure signs/symptoms

## SECTION 4: First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### 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.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
phosphorus 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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

## SECTION 6: Accidental release measures

- 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).
- 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. 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 breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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

Store between the following temperatures: 0 to 25°C (32 to 77°F). Store in accordance with local regulations. Shelf life: 6 months. 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. 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

**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
Hexamethylene diisocyanate, oligomers	DNEL	Short term Inhalation	1 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	0,5 mg/m <sup>3</sup>	Workers	Local
hexamethylene-di-isocyanate	DNEL	Short term Inhalation	1 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	0,5 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	0,35 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	0,7 mg/m <sup>3</sup>	Workers	Local

#### PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Hexamethylene diisocyanate, oligomers	Fresh water	0,199 mg/l	-
	Marine	0,0199 mg/l	-
	Fresh water sediment	44551 mg/kg dwt	-
	Marine water sediment	4455 mg/kg dwt	-
	Soil	8884 mg/kg dwt	-
	Sewage Treatment Plant	100 mg/l	-
hexamethylene-di-isocyanate	Fresh water	0,127 mg/l	-
	Marine	0,0127 mg/l	-
	Sediment	266700 mg/kg dwt	-
	Soil	53182 mg/kg dwt	-
	Sewage Treatment Plant	38,28 mg/l	-
	Fresh water	>0,05 mg/l	-
	Fresh water sediment	>1,33 mg/kg	-
	Marine water	>0,005 mg/l	-
	Marine water sediment	>0,133 mg/kg	-
	Sewage Treatment Plant	55,6 mg/l	-
	Soil	>0,066 mg/kg	-

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Individual protection measures



## SECTION 8: Exposure controls/personal protection

**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 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 (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.

**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: In case of insufficient ventilation, wear suitable respiratory equipment: self-contained breathing apparatus (SCBA)

**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**

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Colourless.
<b>Odour</b>	: Not available.
<b>Odour threshold</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: 221°C (429,8°F) [Literature]
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosion limit</b>	: Not available.
<b>Flash point</b>	: Closed cup: >106°C (>222,8°F) [Literature]
<b>Auto-ignition temperature</b>	: Not relevant due to nature of the product.
<b>Decomposition temperature</b>	: Not available.
<b>pH</b>	: 8,1 [Conc. (% w/w): 100%] [OECD 122]
<b>pH : Justification</b>	: Not available.
<b>Viscosity</b>	: Dynamic (room temperature): 1400 to 2200 mPa·s [ISO EN BS DIN 3219] Kinematic (room temperature): 1223 to 1921 mm²/s [calculated.] Kinematic (40°C): >20,5 mm²/s [calculated.]

**Solubility(ies)**

:

Media	Result
cold water	Soluble
hot water	Soluble

<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/ water</b>	: Not applicable.
<b>Vapour pressure</b>	: Not relevant due to nature of the product.
<b>Evaporation rate</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Density</b>	: 1,145 g/cm³ [23°C (73,4°F)] [DIN 53217]
<b>Vapour density</b>	: Not available.
<b>Explosive properties</b>	: No unusual hazard if involved in a fire.
<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>	: Shelf life: 6 months.
<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.

**SECTION 10: Stability and reactivity****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
Hexamethylene diisocyanate, oligomers	LC50 Inhalation Dusts and mists	Rat	18500 mg/m <sup>3</sup>	1 hours
	LC50 Inhalation Dusts and mists	Rat - Female	390 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Poly(oxy-1,2-ethanediyl), α-tridecyl-ω-hydroxy-, phosphate	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
ethyldiisopropylamine hexamethylene-di-isocyanate	LD50 Oral	Rat	317 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	0,124 mg/m <sup>3</sup>	4 hours
	LCLo Inhalation Dusts and mists	Rat	60 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>7000 mg/kg	-

**Conclusion/Summary** : Harmful if inhaled.**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)
Hexamethylene diisocyanate, oligomers	N/A	N/A	N/A	N/A	1,5
ethyldiisopropylamine	317	N/A	N/A	N/A	N/A
hexamethylene-di-isocyanate	500	N/A	N/A	0,05	N/A

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexamethylene diisocyanate, oligomers	Eyes - Cornea opacity	Rabbit	1	-	-
	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Oedema	Rabbit	1	4 hours	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
hexamethylene-di-isocyanate	Eyes - Redness of the conjunctivae	Rabbit	3	-	-
	Skin - Erythema/Eschar	Rabbit	3	-	-

**Conclusion/Summary****Skin** : Causes skin irritation.**Eyes** : Causes serious eye damage.**Respiratory** : May cause respiratory irritation.**Sensitisation**

**SECTION 11: Toxicological information**

Product/ingredient name	Route of exposure	Species	Result
Hexamethylene diisocyanate, oligomers	Respiratory	Guinea pig	Not sensitizing
	skin	Guinea pig	Sensitising
	skin	Mouse	Sensitising
hexamethylene-di-isocyanate	Respiratory	Guinea pig	Sensitising
	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**

Product/ingredient name	Test	Experiment	Result
Hexamethylene diisocyanate, oligomers	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 406 Skin sensitisation	Subject: Mammalian-Animal	Positive
	OECD 405 Acute eye irritation / corrosion	Subject: Mammalian-Animal	Negative
hexamethylene-di-isocyanate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative

**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**

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

**Teratogenicity**

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

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Hexamethylene diisocyanate, oligomers	Category 3	-	Respiratory tract irritation
hexamethylene-di-isocyanate	Category 3	-	Respiratory tract irritation

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on likely routes of exposure** : Not available.

**Potential acute health effects**

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

**SECTION 11: Toxicological information**

- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : Causes skin irritation. 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:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

**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**

Product/ingredient name	Result	Species	Dose	Exposure
Hexamethylene diisocyanate, oligomers	Sub-chronic LC50 Inhalation Dusts and mists	Rat	14,7 mg/m <sup>3</sup>	6 hours; 5 days per week Intermittent
	Sub-acute LC50 Inhalation Dusts and mists	Rat	89,9 mg/m <sup>3</sup>	6 hours; 5 days per week Intermittent
	Sub-acute LCLo Inhalation Dusts and mists	Rat	4,3 mg/m <sup>3</sup>	6 hours; 5 days per week Intermittent
hexamethylene-di-isocyanate	Chronic LCLo Inhalation Vapour	Rat	0,025 p.p.m.	30 days; 6 hours per day Intermittent

- 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.
- 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**

**SECTION 11: Toxicological information**

Not available.

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

Product/ingredient name	Result	Species	Exposure
Hexamethylene diisocyanate, oligomers	Acute EC50 3828 mg/l	Bacteria	3 hours
	Acute EC50 >100 mg/l	Daphnia spec.	48 hours
	Acute IC50 >1000 mg/l	Algae - <i>Scenedesmus subspicatus</i>	72 hours
ethyl-diisopropylamine hexamethylene-di-isocyanate	Acute LC50 >100 mg/l	Fish	96 hours
	Acute EC50 74,3 mg/l	Daphnia spec. - <i>Daphnia Magna</i>	48 hours
	Acute EC50 >77,4 mg/l	Algae	72 hours
	Acute EC50 842 mg/l	Bacteria	3 hours

**Conclusion/Summary** : Based on available data, the classification criteria are not met.**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
Hexamethylene diisocyanate, oligomers hexamethylene-di-isocyanate	OECD 301C	1 % - Not readily - 28 days	-	-
	OECD 301F	42 % - 10 days	-	-
	EU 301F Ready Biodegradability - Manometric Respirometry Test	42 % - 28 days	-	-

**Conclusion/Summary** : This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hexamethylene diisocyanate, oligomers	Fresh water 0,32 days, 23°C	50%; 0.43 day(s)	Not readily
hexamethylene-di-isocyanate	-	-	Not readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Hexamethylene diisocyanate, oligomers	5,54	367,7	Low
hexamethylene-di-isocyanate	0,02	57,63	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**

4901 Heavy-Duty Varnish - Gloss Activator

SECTION 12: Ecological information

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 11*	waste paint and 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.

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]
hexamethylene-di-isocyanate	≤0,1	74

**Labelling** : Not applicable.

#### Other EU regulations

##### **VOC**

:

##### **VOC for Ready-for-Use Mixture**

: 2004/42/EC - IIA/j: 140g/l (2010). <= 35g/l VOC.

##### **Industrial emissions (integrated pollution prevention and control) - Air**

: Not listed

##### **Industrial emissions (integrated pollution prevention and control) - Water**

: Not listed

##### **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**

: LGK 8A

###### **Classification, packaging and labelling**

: Not available.

###### **Limitation of the use of organic solvents**

: Permitted.

###### **Waste catalogue**

: 55513

## SECTION 15: Regulatory information

**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

**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

## SECTION 15: Regulatory information

<b>Product registration number</b>	: 4124589 PCN
<b>Danish fire class</b>	: Not available.
<b>Denmark – Cancer risks</b>	: Not listed
<b>MAL-code</b>	: 5-4
<b>Protection based on MAL</b>	: <b>According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:</b>

**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: 5-4

**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.

- Protective clothing must be worn.

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

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

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

- Air-supplied full mask 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.

## SECTION 15: Regulatory information

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

\*See Regulations.

**MAL-code for ready-for-use mixture** : 3-3

**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: 3-3

**Application:** When spraying in new\* booths if the operator is outside 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.

- Air-supplied half mask and eye protection must be worn.

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. 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.

- Air-supplied half mask, coveralls and eye protection must be worn.

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

- Air-supplied full mask, arm protectors and apron must be worn.

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.

- Air-supplied full mask, arm protectors and apron 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, coveralls 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.

## SECTION 15: Regulatory information

\*See Regulations.

<b>Low-boiling liquids</b>	: Not available.
<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>Statutory Order 517 on Aerosols</b>	: Not applicable.
<b>List of undesirable substances</b>	: Not listed
<b>Carcinogenic waste</b>	: Not available.
<b>Waste card number</b>	: 03.21
<b>Waste group</b>	: Z
<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

<b>References</b>	: 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
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### Finland

<b>NACE</b>	: Not available.
<b>UC62</b>	: Not available.
<b>References</b>	: 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

## SECTION 15: Regulatory information

Directive 89/686/EEC

### France

- Social Security Code, Articles L 461-1 to L 461-7** : hexamethylene-di-isocyanate RG 62
- 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  
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)** : 8A

### 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
- Technical instruction on air quality control** : TA-Luft Class I - Number 5.2.5: 91,9%  
TA-Luft Number 5.2.5: 8%
- AOX** : The product does not contain organically bound halogens which could lead to an 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  
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

## SECTION 15: Regulatory information

- 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

### 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(4) Low hazard for aquatic organisms, may have long-term hazardous effects in aquatic environment. Decontamination effort: A

#### **Remark**

- : Not available.



## SECTION 15: Regulatory information

**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

**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

## SECTION 15: Regulatory information

**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** : 080111\*

**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** : 3909 50 90 90

### Inventory list

**Australia** : All components are listed or exempted.  
**Canada** : All components are listed or exempted.  
**China** : All components are listed or exempted.  
**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.  
**Japan** : **Japan inventory (CSCL)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.  
**New Zealand** : All components are listed or exempted.  
**Philippines** : Not determined.  
**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
Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335	Expert judgment Expert judgment Expert judgment Expert judgment Expert judgment

### Full text of abbreviated H statements

#### Europe

### Full text of abbreviated H statements

: H225 Highly flammable liquid and vapour.  
 H302 Harmful if swallowed.  
 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.  
 H332 Harmful if inhaled.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335 May cause respiratory irritation.  
 H412 Harmful to aquatic life with long lasting effects.

### Full text of classifications [CLP/GHS]

: Acute Tox. 1 ACUTE TOXICITY - Category 1  
 Acute Tox. 4 ACUTE TOXICITY - Category 4  
 Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3  
 Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1  
 Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2  
 Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2  
 Resp. Sens. 1 RESPIRATORY SENSITISATION - 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 SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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### Notice to reader

## SECTION 16: Other information

**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.