

SAFETY DATA SHEET

H138 Epoxy Primer Hardener



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

1.1 Product identifier

Product name : H138 Epoxy Primer Hardener
Product type : Liquid.

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

Identified uses

Professional spray painting, near-industrial setting
Use in coatings - Hardener.

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

Valspar b.v.
Zuiveringweg 89
8243 PE Lelystad
The Netherlands
tel: +31 (0)320 292200

e-mail address of person responsible for this SDS : msds@valspar.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : UK: 0-800-014-8126
CALL: +(44)-870-8200418 (Hours of operation - 24 hours)

Ireland: +353 1 8092566 Beaumont Hospital - National Poisons Information Centre
CALL: +(353)-19014670 (Hours of operation - 24 hours)

Supplier

Telephone number : Call: +31 (0)320 292200 (8:30AM - 5PM)

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]

Flam. Liq. 3, H226
Acute Tox. 4, H332
Skin Corr. 1B, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
STOT SE 3, H335
STOT RE 2, H373
Asp. Tox. 1, H304
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

SECTION 2: Hazards identification

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapour.
 May be fatal if swallowed and enters airways.
 Causes severe skin burns and eye damage.
 May cause an allergic skin reaction.
 Harmful if inhaled.
 May cause respiratory irritation.
 May cause damage to organs through prolonged or repeated exposure.
 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.

Response

: Collect spillage.

Storage

: Store in a well-ventilated place. Keep container tightly closed.

Disposal

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

Hazardous ingredients

: xylene; benzyl alcohol; Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine) and m-phenylenebis(methylamine)

Supplemental label elements

: 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

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
xylylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
benzyl alcohol	EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg	[1]
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	REACH #: 01-2119966906-20 EC: 500-137-0 CAS: 57214-10-5	≥10 - <25	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
m-phenylenebis (methylamine)	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0	≤10	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412 EUH071	ATE [Oral] = 930 mg/kg ATE [Inhalation (gases)] = 4500 ppm	[1]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 See Section 16 for the full text of the H statements declared above.	-	[1] [2]

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.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains benzyl alcohol, Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine), m-phenylenebis(methylamine). May produce an allergic reaction.

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.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- 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

- : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

- : 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 (see Section 13). Preferably clean with a detergent. Avoid using solvents.

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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.
- Information on fire and explosion protection**

SECTION 7: Handling and storage

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonnes	50000 tonnes
E2	200 tonnes	500 tonnes

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m ³ . STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m ³ .
ethylbenzene	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m ³ . STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m ³ .
toluene	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 192 mg/m ³ . TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m ³ . STEL 15 minutes: 100 ppm.

Biological exposure indices

No exposure indices known.

SECTION 8: Exposure controls/personal protection

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

xylene

Result

DNEL - General population - Consumers - Short term - Inhalation

174 mg/m³

Effects: Local

DNEL - General population - Consumers - Short term - Inhalation

174 mg/m³

Effects: Systemic

DNEL - General population - Long term - Oral

5 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

65.3 mg/m³

Effects: Local

DNEL - General population - Long term - Inhalation

65.3 mg/m³

Effects: Systemic

DNEL - General population - Long term - Dermal

125 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

212 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

221 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

221 mg/m³

Effects: Systemic

DNEL - General population - Short term - Inhalation

260 mg/m³

Effects: Local

DNEL - General population - Short term - Inhalation

260 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Inhalation

442 mg/m³

Effects: Local

SECTION 8: Exposure controls/personal protection

benzyl alcohol

DNEL - Workers - Short term - Inhalation

442 mg/m³

Effects: Systemic

DNEL - General population - Long term - Oral

4 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

4 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

5.4 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

8 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Oral

20 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Dermal

20 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

22 mg/m³

Effects: Systemic

DNEL - General population - Short term - Inhalation

27 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Dermal

40 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Short term - Inhalation

110 mg/m³

Effects: Systemic

ethylbenzene

DMEL - Workers - Long term - Inhalation

442 mg/m³

Effects: Local

DMEL - Workers - Short term - Inhalation

884 mg/m³

Effects: Systemic

DNEL - General population - Long term - Oral

1.6 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

15 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

77 mg/m³

SECTION 8: Exposure controls/personal protection

	<p><u>Effects</u>: Systemic</p> <p>DNEL - Workers - Long term - Dermal 180 mg/kg bw/day <u>Effects</u>: Systemic</p> <p>DNEL - Workers - Short term - Inhalation 293 mg/m³ <u>Effects</u>: Local</p>
m-phenylenebis(methylamine)	<p>DNEL - Workers - Long term - Inhalation 0.2 mg/m³ <u>Effects</u>: Local</p> <p>DNEL - Workers - Long term - Dermal 0.33 mg/kg bw/day <u>Effects</u>: Systemic</p> <p>DNEL - Workers - Long term - Inhalation 1.2 mg/m³ <u>Effects</u>: Systemic</p>
toluene	<p>DNEL - General population - Long term - Oral 8.13 mg/kg bw/day <u>Effects</u>: Systemic</p> <p>DNEL - General population - Long term - Inhalation 56.5 mg/m³ <u>Effects</u>: Local</p> <p>DNEL - General population - Long term - Inhalation 56.5 mg/m³ <u>Effects</u>: Systemic</p> <p>DNEL - Workers - Long term - Inhalation 192 mg/m³ <u>Effects</u>: Local</p> <p>DNEL - Workers - Long term - Inhalation 192 mg/m³ <u>Effects</u>: Systemic</p> <p>DNEL - General population - Long term - Dermal 226 mg/kg bw/day <u>Effects</u>: Systemic</p> <p>DNEL - General population - Short term - Inhalation 226 mg/m³ <u>Effects</u>: Local</p> <p>DNEL - General population - Short term - Inhalation 226 mg/m³ <u>Effects</u>: Systemic</p> <p>DNEL - Workers - Long term - Dermal 384 mg/kg bw/day <u>Effects</u>: Systemic</p> <p>DNEL - Workers - Short term - Inhalation 384 mg/m³ <u>Effects</u>: Local</p> <p>DNEL - Workers - Short term - Inhalation</p>

SECTION 8: Exposure controls/personal protection

384 mg/m³
Effects: Systemic

PNECs

Product/ingredient name

xylene

Result

Fresh water

0.327 mg/l

Marine water

0.327 mg/l

Sewage Treatment Plant

6.58 mg/l

Fresh water sediment

12.46 mg/kg dwt

Marine water sediment

12.46 mg/kg dwt

Soil

2.31 mg/kg dwt

benzyl alcohol

Fresh water - Assessment Factors

1 mg/l

Marine water - Assessment Factors

0.1 mg/l

Sewage Treatment Plant - Assessment Factors

39 mg/l

Fresh water sediment - Equilibrium Partitioning

5.27 mg/kg dwt

Marine water sediment - Equilibrium Partitioning

0.527 mg/kg dwt

Soil

0.456 mg/kg dwt

ethylbenzene

Fresh water

0.1 mg/l

Marine water

0.01 mg/l

Sewage Treatment Plant

9.6 mg/l

Fresh water sediment

13.7 mg/kg dwt

Marine water sediment

1.37 mg/kg dwt

Soil

2.68 mg/kg dwt

m-phenylenebis(methylamine)

Fresh water

0.094 mg/l

SECTION 8: Exposure controls/personal protection

	Marine water 0.0094 mg/l
	Sewage Treatment Plant 10 mg/l
	Fresh water sediment 0.43 mg/kg dwt
	Marine water sediment 0.043 mg/kg dwt
	Soil 0.045 mg/kg dwt
toluene	Fresh water 0.68 mg/l
	Marine water 0.68 mg/l
	Sewage Treatment Plant 13.61 mg/l
	Fresh water sediment 16.39 mg/kg dwt
	Marine water sediment 16.39 mg/kg dwt
	Soil 2.89 mg/kg dwt

8.2 Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Use safety eyewear designed to protect against splash of liquids.

Skin protection

Hand 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.

SECTION 8: Exposure controls/personal protection

- Gloves** : 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): Recommended EN 374 foil ≥ 0.7 mm < 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (≥ 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.
- 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- 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: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D
- 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

Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Aromatic.
- Odour threshold** : Not available.
- Melting point/freezing point** : Not applicable.
- Boiling point or initial boiling point and boiling range** : $>100^{\circ}\text{C}$ ($>212^{\circ}\text{F}$)
- Flammability** : Not available.
- Lower and upper explosion limit** : Lower: 0.8%
Upper: 13%
- Flash point** : Closed cup: 29°C (84.2°F)
- Auto-ignition temperature** : 432°C (809.6°F)
- Decomposition temperature** : Not applicable.
- pH** : Not applicable.
- Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): $6\text{ mm}^2/\text{s}$

SECTION 9: Physical and chemical properties**Solubility** :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not applicable.**Partition coefficient n-octanol/water (log Pow)** : Not applicable.**Vapour pressure** : 0.8 kPa (6 mm Hg)**Relative density** : 0.904**Density** : 0.904 g/cm³**Relative vapour density** : 3.7 [Air = 1]**Particle characteristics****Median particle size** : Not applicable.**9.2 Other information****9.2.1 Information with regard to physical hazard classes****Explosive properties** : Not available.**Oxidising properties** : Not available.**9.2.2 Other safety characteristics****Miscible with water** : No.**Evaporation rate** : 0.77 (butyl acetate = 1)**SECTION 10: Stability and reactivity****10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.**10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.**10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.**10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.**10.6 Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

SECTION 11: Toxicological information

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains benzyl alcohol, Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis(methylamine), m-phenylenebis(methylamine). May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result
xylene	<p>Rabbit - Dermal - LD50 12126 mg/kg</p> <p>Rat - Oral - LD50 4300 mg/kg</p> <p>Rat - Male - Inhalation - LC50 Vapour 29000 mg/l [4 hours]</p> <p>Rat - Inhalation - LC50 Gas. 5000 ppm [4 hours]</p>
benzyl alcohol	<p>Rat - Oral - LD50 1230 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Behavioral - Excitement Behavioral - Coma</p> <p>Rabbit - Dermal - LD50 2000 mg/kg</p> <p>Rat - Inhalation - LC50 Dusts and mists 4178 mg/l [4 hours] OECD 403 [Acute Inhalation Toxicity]</p>
ethylbenzene	<p>Rabbit - Dermal - LD50 12126 mg/kg</p> <p>Rat - Oral - LD50 3500 mg/kg <u>Toxic effects:</u> Liver - Other changes Kidney, Ureter, and Bladder - Other changes</p> <p>Rat - Inhalation - LC50 Vapour 6350 ppm [4 hours]</p>
m-phenylenebis(methylamine)	<p>Rat - Oral - LD50 930 mg/kg</p> <p>Rabbit - Dermal - LD50 2 g/kg</p> <p>Rat - Inhalation - LC50 Gas. 700 ppm [1 hours] <u>Toxic effects:</u> Eye - Lacrimation Lung, Thorax, or Respiration - Respiratory depression</p>
toluene	<p>Rabbit - Dermal - LD50 >5000 mg/kg</p> <p>Rat - Oral - LD50 636 mg/kg</p> <p>Rat - Inhalation - LC50 Vapour</p>

SECTION 11: Toxicological information

28.1 mg/l [4 hours]

Conclusion/Summary [Product] : Not available.

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)
H138 Epoxy Primer Hardener	3812.3	2472.7	9197.2	118.5	N/A
xylene	4300	1100	5000	29000	N/A
benzyl alcohol	1200	N/A	N/A	N/A	4178
ethylbenzene	3500	12126	N/A	11	N/A
m-phenylenebis(methylamine)	930	N/A	4500	N/A	N/A
toluene	N/A	N/A	N/A	28.1	N/A

Skin corrosion/irritation

Product/ingredient name

xylene

Result

Rat - Skin - Mild irritant

Duration of treatment/exposure: 8 hours

Amount/concentration applied: 60 uL

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Skin - Moderate irritant

Amount/concentration applied: 100 %

benzyl alcohol

Man - Skin - Mild irritant

Duration of treatment/exposure: 48 hours

Amount/concentration applied: 16 mg

Pig - Skin - Moderate irritant

Amount/concentration applied: 100 %

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 mg

ethylbenzene

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 15 mg

m-phenylenebis(methylamine)

Rabbit - Skin - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 750 ug

toluene

Pig - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 250 uL

Rabbit - Skin - Mild irritant

Amount/concentration applied: 435 mg

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 20 mg

Rabbit - Skin - Moderate irritant

SECTION 11: Toxicological information

Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

xylene

Result

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 87 mg

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 5 mg

ethylbenzene

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 500 mg

m-phenylenebis(methylamine)

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 50 ug

toluene

Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 0.5 minutes

Amount/concentration applied: 100 mg

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 870 ug

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 2 mg

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 0.1 MI

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

SECTION 11: Toxicological information

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

xylene
toluene

Result

STOT SE 3, H335 (Respiratory tract irritation)
STOT SE 3, H336 (Narcotic effects)

Specific target organ toxicity (repeated exposure)

Product/ingredient name

xylene
ethylbenzene
toluene

Result

STOT RE 2, H373
STOT RE 2, H373 (hearing organs)
STOT RE 2, H373

Aspiration hazard

Product/ingredient name

xylene
ethylbenzene
toluene

Result

ASPIRATION HAZARD - Category 1
ASPIRATION HAZARD - Category 1
ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : May be fatal if swallowed and enters airways.

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
nausea or vomiting

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.

SECTION 11: Toxicological information**Long term exposure****Potential immediate effects** : Not available.**Potential delayed effects** : Not available.**Potential chronic health effects**

Not available.

Conclusion/Summary [Product] : Not available.**General** : May cause 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** : No known significant effects or critical hazards.**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.**11.2.2 Other information**

Not available.

SECTION 12: Ecological information**12.1 Toxicity**There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name

xylene

Result**Acute - EC50**Algae
1 to 10 mg/l [72 hours]**Acute - LC50 - Marine water**Crustaceans - Daggerblade grass shrimp - *Palaemon pugio*
8500 µg/l [48 hours]
Effect: Mortality**Acute - LC50 - Fresh water**Fish - Fathead minnow - *Pimephales promelas*
Age: 31 days; Size: 18.4 mm; Weight: 0.077 g
13.4 mg/l [96 hours]
Effect: Mortality

benzyl alcohol

Acute - IC50Algae
700 mg/l [72 hours]**Acute - LC50 - Fresh water**Fish - Bluegill - *Lepomis macrochirus*
10 ppm [96 hours]
Effect: Mortality

ethylbenzene

Acute - LC50 - Fresh waterFish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss*

SECTION 12: Ecological information

4200 µg/l [96 hours]

Effect: Mortality

Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate

Age: ≤24 hours

2.93 mg/l [48 hours]

Effect: Intoxication

Acute - EC50 - Fresh water

Algae - Green algae - *Raphidocelis subcapitata*

3600 µg/l [96 hours]

Effect: Population

m-phenylenebis(methylamine)

Acute - EC50

Algae

12 mg/l [72 hours]

toluene

Acute - LC50

Fish - *Oncorhynchus kisutch*

5.5 mg/l [96 hours]

Acute - EC50

Daphnia - *Daphnia magna*

3.8 mg/l [48 hours]

Chronic - NOEC - Fresh water

Daphnia - Water flea - *Daphnia magna*

Age: ≤24 hours

1 mg/l [21 days]

Effect: Mortality

Acute - EC50 - Fresh water

Algae - Green algae - *Raphidocelis subcapitata*

12.5 mg/l [72 hours]

Effect: Growth

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
toluene	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylene	3.12	8.1 to 25.9	Low
benzyl alcohol	0.87	-	Low
ethylbenzene	3.6	-	Low
m-phenylenebis (methylamine)	0.18	2.69	Low
toluene	2.73	90	Low

12.4 Mobility in soil

SECTION 12: Ecological information**Soil/water partition coefficient**

Product/ingredient name	logKoc	Koc
benzyl alcohol	1.1	12.6442
ethylbenzene	2.2	170.406
m-phenylenebis(methylamine)	1.7	46.5812
toluene	2.1	117.115

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
xylene	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No
m-phenylenebis (methylamine)	No	No	No	No	No	No	No
toluene	No	No	No	No	No	No	No

Mobility : Not available.**Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.**12.5 Results of PBT and vPvB assessment****Regulation (EC) No. 1907/2006 [REACH]**

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
xylene	No	N/A	No	Yes	No	N/A	No
benzyl alcohol	No	N/A	N/A	No	N/A	N/A	N/A
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	No	N/A	N/A	No	N/A	N/A	N/A
ethylbenzene	N/A	N/A	N/A	Yes	N/A	N/A	N/A
m-phenylenebis (methylamine)	No	N/A	No	No	No	N/A	No
toluene	No	N/A	No	Yes	No	N/A	No

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
xylene	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No
m-phenylenebis (methylamine)	No	No	No	No	No	No	No
toluene	No	No	No	No	No	No	No

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.**Regulation (EC) No. 1272/2008 [CLP]****12.6 Endocrine disrupting properties**

Not available.

SECTION 12: Ecological information

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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 : The classification of the product may meet the criteria for a hazardous waste.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging	European waste catalogue (EWC)
CEPE Guidelines	15 01 10* packaging containing residues of or contaminated by 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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	UN3470	UN3470	UN3470	UN3470
14.2 UN proper shipping name	PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE	PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE	PAINT RELATED MATERIAL CORROSIVE, FLAMMABLE	Paint related material, corrosive, flammable

SECTION 14: Transport information

14.3 Transport hazard class(es)	8 (3) 	8 (3) 	8 (3) 	8 (3)
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Hazard identification number 83

Limited quantity 1 L

Special provisions 163, 367

Tunnel code (D/E)

ADN

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special provisions 163, 367

IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, S-C

Special provisions 163, 367

IATA

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851.

Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities -

Passenger Aircraft: 0.5 L. Packaging instructions: Y840.

Special provisions A72, A192

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 Maritime 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 above the relevant limit.

Substances of very high concern

None of the components are listed above the relevant limit.

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

SECTION 15: Regulatory information

Product/ingredient name	%	Designation [Usage]
H138 Epoxy Primer Hardener	≥90	3
toluene	<1	48

Labelling : Not applicable.

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-for-Use Mixture : Not available.

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 (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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**: All components are listed or exempted.

SECTION 15: Regulatory information

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	: All components are listed or exempted.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: All components are listed or exempted.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

CEPE code : 1

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- B = Bioaccumulative
- BCF = Bioconcentration Factor
- 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
- IATA = International Air Transport Association
- IMDG = International Maritime Dangerous Goods
- IMO = International Maritime Organization
- M = Mobile
- N/A = Not available
- P = Persistent
- PBT = Persistent, Bioaccumulative and Toxic
- PMT = Persistent, Mobile and Toxic
- PNEC = Predicted No Effect Concentration
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- RRN = REACH Registration Number
- SGG = Segregation Group
- T = Toxic
- vB = Very Bioaccumulative
- vM = Very Mobile
- vP = Very Persistent
- vPvB = Very Persistent and Very Bioaccumulative
- vPvM = Very Persistent and Very Mobile

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

SECTION 16: Other information

Classification	Justification
Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing : 9/8/2025
Date of issue/ Date of revision : 9/1/2025
Date of previous issue : No previous validation
Version : 1

Notice to reader

SECTION 16: Other information

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 product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

SUMI

Safe Use of Mixtures

Information for end-users



Title : Professional spray painting, near-industrial setting

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor spray painting by professionals with efficient ventilation such as spray booth or local exhaust ventilation

Operational conditions

Place of use : Indoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation	
			Type	ach (air changes per hour)
Preparation of material for application	PROC05	1 to 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Loading of application equipment and handling of coated parts before curing	PROC08a	15 minutes to 1 hour	Enhanced (mechanical) room ventilation	5 - 10
Professional application of coatings and inks by spraying	PROC11	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards
Film formation - force drying, stoving and other technologies	PROC04	1 to 4 hours	Enhanced (mechanical) room ventilation	Refer to relevant technical standards
Cleaning	PROC05	1 to 4 hours	Enhanced (mechanical) room ventilation	5 - 10
Waste management	PROC08a	15 minutes to 1 hour	Enhanced (mechanical) room ventilation	5 - 10

Contributing activity	Process category (ies)	Respiratory	Eye	Hands
Preparation of material for application	PROC05	None	Use eye protection according to EN ISO 16321.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08a	None	Use eye protection according to EN ISO 16321.	Wear suitable gloves tested to EN374.
Professional application of coatings and inks by spraying	PROC11	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN ISO 16321.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	None	None
Cleaning	PROC05	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN ISO 16321.	Wear suitable gloves tested to EN374.
Waste management	PROC08a	Wear a respirator conforming to EN140 with	Use eye protection according to EN ISO 16321.	Wear suitable gloves tested to EN374.

		an assigned protection factor of at least 10.		
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See section 8 of this Safety Data Sheet for specifications.



Disclaimer

The information in this Safe Use of Mixture Information sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the SDS and the label of the product.

No liability is accepted for any damage, no matter of what kind, which is direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.