

SAFETY DATA SHEET



Fast-Metal Minute Adhesive Hardener

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

1.1 Product identifier

Product name : Fast-Metal Minute Adhesive Hardener
UFI : Y3X1-F0WX-600M-VDVV
Product code : 105512
Color : White.
Product description : Hardener for resins.
Product type : Liquid.
Other means of identification : Not available.

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

Identified uses

Hardener for resins.

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

WEICON GmbH & Co. KG
Königsberger Str. 255,
48157 Münster, Germany
phone: +49 251 93220,
email: info@weicon.de,
URL: www.weicon.de

e-mail address of person responsible for this SDS : msds@weicon.de

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)
TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Corr. 1C, H314

Eye Dam. 1, H318

Skin Sens. 1, H317

Aquatic Chronic 2, H411

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

Ingredients of unknown toxicity : 35.1 percent of the mixture consists of component(s) of unknown acute oral toxicity
35.1 percent of the mixture consists of component(s) of unknown acute dermal toxicity
35.1 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

SECTION 2: Hazards identification

Ingredients of unknown ecotoxicity : Contains 35.1% of components with unknown hazards to the aquatic environment

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

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

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

General : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

Prevention : P261 - Avoid breathing vapor.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Response : P391 - Collect spillage.
P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor.
P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.
P363 - Wash contaminated clothing before reuse.
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage : P405 - Store locked up.

Disposal : P501 - Dispose of waste according to applicable legislation.

Hazardous ingredients : Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide; pentaerythritol tetrakis(3-mercaptopropionate) and 2,4,6-tris(dimethylaminomethyl)phenol

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 : Yes, applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture contains substances that are assessed to be a PBT or a vPvB, refer to Section 3.2.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide	REACH #: 01-2120118957-46	≥25 - ≤50	Skin Sens. 1B, H317 Aquatic Chronic 3, H412	-	[1]
Talc , not containing asbestiform fibres	REACH #: 01-2120140278-58 EC: 238-877-9 CAS: 14807-96-6	≥10 - ≤25	Not classified.	-	[2]
Silica, vitreous	EC: 262-373-8 CAS: 60676-86-0	≥10 - ≤25	Not classified.	-	[2]
pentaerythritol tetrakis (3-mercaptopropionate)	EC: 231-472-8 CAS: 7575-23-7	≥5 - ≤10	Acute Tox. 4, H302 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]
2,4,6-tris (dimethylaminomethyl) phenol	EC: 202-013-9 CAS: 90-72-2	≥5 - ≤6.1	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 500 mg/kg	[1]
titanium dioxide	EC: 236-675-5 CAS: 13463-67-7	≥3 - ≤5	Not classified.	-	[2]
3-mercaptopropionic acid	EC: 203-537-0 CAS: 107-96-0	<0.1	Met. Corr. 1, H290 Acute Tox. 3, H301 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318	ATE [Oral] = 96 mg/kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1]
octamethylcyclotetrasiloxane	EC: 209-136-7 CAS: 556-67-2	<0.01	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	M [Chronic] = 10	[1] [3] [4]

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

SECTION 3: Composition/information on ingredients

- [1] Substance classified with a physical, health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
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

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized 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 spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. 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

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 vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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 in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E2	200 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 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

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
Talc , not containing asbestiform fibres	DFG MAC-values list (Germany, 7/2024) Carc 3B. TRGS 900 OEL (Germany, 3/2025) [Allgemeiner Staubgrenzwert] TWA 8 hours: 1.25 mg/m³. Form: alveolar fraction. PEAK 15 minutes: 20 mg/m³. Form: inhalable fraction. TWA 8 hours: 10 mg/m³. Form: inhalable fraction. PEAK 15 minutes: 2.5 mg/m³. Form: alveolar fraction.
Silica, vitreous	DFG MAC-values list (Germany, 7/2024) [Silica, amorphous: quartz glass ,fused silica, silica fume (calcined), diatomaceous earth] Develop C. TWA 8 hours: 0.3 mg/m³. Form: respirable fraction. DFG MAC-values list (Germany, 7/2024) [Silica, crystalline] Carc 1.
titanium dioxide	TRGS 900 OEL (Germany, 3/2025) TWA 8 hours: 0.3 mg/m³. Form: alveolar fraction. DFG MAC-values list (Germany, 7/2024) Carc 4, Develop C. PEAK 15 minutes: 2.4 mg/m³ 4 times per shift [Interval: 1 hour]. Form: respirable fraction. TWA 8 hours: 0.3 mg/m³. Form: respirable fraction. TRGS 900 OEL (Germany, 3/2025) [Allgemeiner Staubgrenzwert] TWA 8 hours: 1.25 mg/m³. Form: alveolar fraction. PEAK 15 minutes: 20 mg/m³. Form: inhalable fraction. TWA 8 hours: 10 mg/m³. Form: inhalable fraction. PEAK 15 minutes: 2.5 mg/m³. Form: alveolar fraction.

Biological exposure indices

No exposure indices known.

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	Result
pentaerythritol tetrakis (3-mercaptopropionate)	DNEL - General population - Long term - Oral 0.25 mg/kg bw/day <u>Effects</u> : Systemic DNEL - General population - Long term - Inhalation 0.87 mg/m³ <u>Effects</u> : Systemic DNEL - General population - Long term - Dermal 2.5 mg/kg bw/day <u>Effects</u> : Systemic DNEL - Workers - Long term - Inhalation 4.93 mg/m³ <u>Effects</u> : Systemic DNEL - Workers - Long term - Dermal 7 mg/kg bw/day <u>Effects</u> : Systemic

SECTION 8: Exposure controls/personal protection

2,4,6-tris(dimethylaminomethyl)phenol

DNEL - General population - Long term - Oral

0.075 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Dermal

0.075 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

0.075 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Inhalation

0.13 mg/m³

Effects: Systemic

DNEL - General population - Long term - Inhalation

0.13 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

0.15 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

0.53 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Dermal

0.6 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Short term - Inhalation

2.1 mg/m³

Effects: Systemic

3-mercaptopropionic acid

DNEL - Workers - Long term - Dermal

0.412 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

1.45 mg/m³

Effects: Systemic

octamethylcyclotetrasiloxane

DNEL - General population - Long term - Oral

3.7 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

13 mg/m³

Effects: Local

DNEL - General population - Long term - Inhalation

13 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

73 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

73 mg/m³

SECTION 8: Exposure controls/personal protection

Effects: Systemic

PNECs

Not available.

8.2 Exposure controls

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

Individual protection measures

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

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. 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

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. Recommended : 1 - 4 hours (breakthrough time): Protective gloves made of nitrile rubber (material thickness of 0,4 mm); EN 374-5 Cat. III ; 4 - 8 hours (breakthrough time): Protective gloves made of Viton®/ butyl rubber (material thickness of 0,7 mm); EN388 Cat.II / EN374 Cat.III / EN374-2

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.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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

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. [Paste.]

Color : White.

Fast-Metal Minute Adhesive Hardener

SECTION 9: Physical and chemical properties

Odor : Sulfurous.

Odor threshold : Not available.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : Not available.

Flammability : Not available.

Lower and upper explosion limit : Not available.

Flash point :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
octamethylcyclotetrasiloxane	56	132.8	ISO 2719	82.7	180.9	ASTM D 3828-87
decamethylcyclopentasiloxane						
3-mercaptopropionic acid	123.5	254.3				
propylidynetrimethanol	172	341.6				
pentaerythritol tetrakis (3-mercaptopropionate)	215	419	ISO 2719			

Auto-ignition temperature :

Ingredient name	°C	°F	Method
decamethylcyclopentasiloxane	372	701.6	ASTM E 659-78
2,4,6-tris(dimethylaminomethyl)phenol	382	719.6	EU A.15
octamethylcyclotetrasiloxane	384 to 387	723.2 to 728.6	ASTM E 659

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

Solubility :
Not available.

Solubility in water : Not available.

Partition coefficient n-octanol/ water (log Pow) : Not applicable.

Vapor pressure :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
octamethylcyclotetrasiloxane	0.99008	0.13	EU A.4			
decamethylcyclopentasiloxane	0.25	0.033				
2,4,6-tris(dimethylaminomethyl) phenol	0.056	0.0075				
3-mercaptopropionic acid	0.01628	0.0022				
pentaerythritol tetrakis (3-mercaptopropionate)	0	0	EU A.4			
propylidynetrimethanol	0	0				

Relative density : Not available.

Density : 1.6 g/cm³ [20°C (68°F)] [Calculated value]

Relative vapor density : Not available.

Fast-Metal Minute Adhesive Hardener

SECTION 9: Physical and chemical properties

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.
Oxidizing properties : Not available.

9.2.2 Other safety characteristics
Miscible with water : No.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity
Product/ingredient name **Result**
3-mercaptopropionic acid **Rat - Oral - LD50**
96 mg/kg

octamethylcyclotetrasiloxane **Rat - Inhalation - LC50 Vapor**
36 g/m³ [4 hours]
Toxic effects: Behavioral - Excitement Lung, Thorax, or
Respiration - Dyspnea Other - Hair

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Easy-Mix Metal Epoxy Adhesive Hardener	2148.6	N/A	N/A	N/A	N/A
pentaerythritol tetrakis(3-mercaptopropionate)	500	N/A	N/A	N/A	N/A
2,4,6-tris(dimethylaminomethyl)phenol	500	N/A	N/A	N/A	N/A
3-mercaptopropionic acid	96	N/A	N/A	N/A	1.5
octamethylcyclotetrasiloxane	N/A	N/A	N/A	36	N/A

Skin corrosion/irritation
Not available.

SECTION 11: Toxicological information

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Not available.

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.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

SECTION 11: Toxicological information

Skin contact : Causes severe burns. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

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 and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

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.

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

Product/ingredient name

octamethylcyclotetrasiloxane

Result

Chronic - NOEC - Fresh water

Daphnia - Water flea - *Daphnia magna*

Age: <24 hours

7.9 µg/l [21 days]

Effect: Mortality

Chronic - NOEC

STDMETH

Algae - Green algae - *Selenastrum capricornutum*

1 to 29 µg/l [96 hours]

SECTION 12: Ecological information

Effect: Population

Chronic - NOEC - Fresh water

Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss* - Embryo

Age: ≤24 hours

4.4 µg/l [33 days]

Effect: Mortality

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
pentaerythritol tetrakis (3-mercaptopropionate)	3.03	23.7	Low
2,4,6-tris (dimethylaminomethyl) phenol	0.219	-	Low
3-mercaptopropionic acid	-2.32	-	Low
octamethylcyclotetrasiloxane	6.488	13400 [EPA OTS 797.1520]	High

12.4 Mobility in soil

Soil/Water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
pentaerythritol tetrakis (3-mercaptopropionate)	2.3	181.312
2,4,6-tris(dimethylaminomethyl)phenol	2.7	525.589
3-mercaptopropionic acid	1.2	14.4949
octamethylcyclotetrasiloxane	3.5	3064.9

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide	No	No	No	No	No	No	No
pentaerythritol tetrakis (3-mercaptopropionate)	No	No	No	No	No	No	No
2,4,6-tris (dimethylaminomethyl) phenol	No	No	No	No	No	No	No
3-mercaptopropionic acid	No	No	No	No	No	No	No
octamethylcyclotetrasiloxane	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]

SECTION 12: Ecological information

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide	No	N/A	N/A	No	N/A	N/A	N/A
pentaerythritol tetrakis (3-mercaptopropionate)	No	N/A	No	No	No	N/A	No
2,4,6-tris (dimethylaminomethyl) phenol	No	N/A	N/A	No	N/A	N/A	N/A
3-mercaptopropionic acid	No	N/A	N/A	No	N/A	N/A	N/A
octamethylcyclotetrasiloxane	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Reaction products of pentaerythritol, propoxylated and 1-chloro-2,3-epoxypropane with hydrogen sulfide	No	No	No	No	No	No	No
pentaerythritol tetrakis (3-mercaptopropionate)	No	No	No	No	No	No	No
2,4,6-tris (dimethylaminomethyl) phenol	No	No	No	No	No	No	No
3-mercaptopropionic acid	No	No	No	No	No	No	No
octamethylcyclotetrasiloxane	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.

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 minimized 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)

SECTION 13: Disposal considerations

Waste code	Waste designation
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

Packaging

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

Type of packaging	European waste catalogue (EWC)
Can	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. Avoid dispersal of spilled 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	UN1760	UN1760	UN1760	UN1760
14.2 UN proper shipping name	CORROSIVE LIQUID, N.O.S. (2,4,6-tris (dimethylaminomethyl) phenol)	CORROSIVE LIQUID, N.O.S. (2,4,6-tris (dimethylaminomethyl) phenol)	CORROSIVE LIQUID, N.O.S. (2,4,6-tris (dimethylaminomethyl) phenol)	CORROSIVE LIQUID, N.O.S. (2,4,6-tris (dimethylaminomethyl) phenol)
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	III	III	III	III
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.
Tunnel code (E)

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

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

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

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 authorization

Annex XIV

None of the components are listed above the relevant limit.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
PBT	octamethylcyclotetrasiloxane	Recommended	10th recommendation	4/14/2021
vPvB	octamethylcyclotetrasiloxane	Recommended	10th recommendation	4/14/2021

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

Product/ingredient name	%	Designation [Usage]
Easy-Mix Metal Epoxy Adhesive Hardener	≥90	3

Labeling : Not applicable.

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Not applicable.

Total percentage of synthetic polymer microparticles : Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : 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 is controlled under the Seveso Directive.

Danger criteria

Category
E2

VOC content : 1,211%

VOC (g/L) : 19,379

National regulations

SECTION 15: Regulatory information

Product/ingredient name	List name	Name on list	Classification	Notes
Talc (Mg ₃ H ₂ (SiO ₃) ₄) Silica, vitreous	DFG MAC-values list DFG MAC-values list	- Silica, amorphous: quartz glass ,fused silica, silica fume (calcined), diatomaceous earth	Carc 3B Develop C	- -
titanium dioxide	DFG MAC-values list DFG MAC-values list	Silica, crystalline -	Carc 1 Carc 4, Develop C	-

Storage class (TRGS 510) : 8B

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

Category	Reference number
E2	1.3.2

Hazard class for water : 3

Technical instruction on air quality control (TA Luft)

Number [Class]	Description	%
5.2.1	Total dust	51.1
5.2.5	Organic substances	45.5
5.2.5 [I]	Organic substances	0.039

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	: Not determined.
Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory : Not determined.
Japan	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.

SECTION 15: Regulatory information

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 :

- 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]

Classification	Justification
Skin Corr. 1C, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H226	Flammable liquid and vapor.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H361f	Suspected of damaging fertility.
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.

Full text of classifications [CLP/GHS]

SECTION 16: Other information

Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Met. Corr. 1	CORROSIVE TO METALS - Category 1
Repr. 2	TOXIC TO REPRODUCTION - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Sens. 1	SKIN SENSITIZATION - Category 1
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B

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