

SAFETY DATA SHEET



WEICON WL Epoxy Hardener

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

1.1 Product identifier

Product name : WEICON WL Epoxy Hardener
UFI : V7A1-402K-T00R-C9PP
Product code : 103802
Color : Light brown.

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

Identified uses

Hardener for resins.

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
Fax: +49(0)251 / 9322 - 244
Internet: www.weicon.de

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

1.4 Emergency 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]

Acute Tox. 4, H302
Acute Tox. 4, H332
Skin Corr. 1B, 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.

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

SECTION 2: Hazards identification

| | |
|---|---|
| Hazard statements | : H302 + H332 - Harmful if swallowed or if inhaled. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H411 - Toxic to aquatic life with long lasting effects. |
| <u>Precautionary statements</u> | |
| Prevention | : P280 - Wear protective gloves, protective clothing and eye or face protection. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P261 - Avoid breathing vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling. |
| 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. P302 + P352 - IF ON SKIN: Wash with plenty of water. 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 | : benzyl alcohol Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) 3-aminomethyl-3,5,5-trimethylcyclohexylamine 3-aminopropyltriethoxysilane m-phenylenebis(methylamine) Phenol, styrenated |
| 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. |
| 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

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|--|---|-----------|---|---|---------|
| benzyl alcohol | REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5 | ≥25 - ≤50 | Acute Tox. 4, H302 Acute Tox. 4, H332 | ATE [Oral] = 500 mg/kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l | [1] [2] |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | REACH #: 01-2119972320-44 EC: 500-191-5 CAS: 68082-29-1 | ≥25 - ≤50 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Chronic 2, H411 | - | [1] |
| Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | REACH #: 01-2119983521-35 EC: 606-078-8 CAS: 186321-96-0 | ≥10 - <25 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 | M [Acute] = 1 M [Chronic] = 1 | [1] |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) | REACH #: 01-2119965162-39 EC: 500-302-7 CAS: 113930-69-1 | ≤10 | Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | - | [1] |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | EC: 220-666-8 CAS: 2855-13-2 | ≤10 | Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412 | ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg | [1] [2] |
| 3-aminopropyltriethoxysilane | REACH #: 01-2119480479-24 EC: 213-048-4 CAS: 919-30-2 | ≤10 | Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 | ATE [Inhalation (vapours)] = 11 mg/l | [1] |
| 2,4,6-tris (dimethylaminomethyl) phenol | EC: 202-013-9 CAS: 90-72-2 | ≤3 | Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 | ATE [Oral] = 500 mg/kg | [1] |
| m-phenylenebis (methylamine) | REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0 | ≤3 | Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 | ATE [Oral] = 500 mg/kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l | [1] [2] |
| Phenol, styrenated | REACH #: 01-2119980970-27 EC: 262-975-0 CAS: 61788-44-1 | ≤3 | Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411 | - | [1] |

SECTION 3: Composition/information on ingredients

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

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.

[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

- 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.

SECTION 4: First aid measures

- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. 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
halogenated compounds
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.

SECTION 6: Accidental release measures

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

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

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store 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 tonne | 500 tonne |

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Exposure limit values |
|--|---|
| benzyl alcohol | DFG MAC-values list (Germany, 10/2021). Absorbed through skin. PEAK: 44 mg/m ³ , 4 times per shift, 15 minutes. PEAK: 10 ppm, 4 times per shift, 15 minutes. TWA: 22 mg/m ³ 8 hours. TWA: 5 ppm 8 hours. TRGS 900 OEL (Germany, 7/2021). Absorbed through skin. PEAK: 10 ppm 15 minutes. PEAK: 44 mg/m ³ 15 minutes. TWA: 22 mg/m ³ 8 hours. TWA: 5 ppm 8 hours. |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | DFG MAC-values list (Germany, 10/2021). Skin sensitizer. |
| m-phenylenebis(methylamine) | DFG MAC-values list (Germany, 10/2021). Skin sensitizer. |

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 | Type | Exposure | Value | Population | Effects |
|-------------------------|------|-----------------------|-----------------------|--------------------|----------|
| benzyl alcohol | DNEL | Long term Oral | 4 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 4 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 5.4 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 8 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Oral | 20 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 20 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 22 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 27 mg/m ³ | General population | Systemic |
| | DNEL | Short term Dermal | 40 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 110 mg/m ³ | Workers | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|---|------|-----------------------|-------------------------|--------------------|----------|
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | DNEL | Long term Oral | 0.56 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.56 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 0.97 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 1.1 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 3.9 mg/m ³ | Workers | Systemic |
| Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | DNEL | Long term Oral | 0.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 1 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 1.74 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 7.05 mg/m ³ | Workers | Systemic |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylamine) | DNEL | Long term Oral | 50 µg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 50 µg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 74 µg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.14 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.493 mg/m ³ | Workers | Systemic |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | DNEL | Short term Inhalation | 0.073 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 0.073 mg/m ³ | Workers | Local |
| | DNEL | Long term Oral | 0.526 mg/kg bw/day | General population | Systemic |
| 3-aminopropyltriethoxysilane | DNEL | Long term Oral | 1 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 1 mg/kg | General | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | bw/day | population | |
|--|------|-----------------------|------------------------|--------------------|----------|
| 2,4,6-tris(dimethylaminomethyl) phenol | DNEL | Long term Dermal | 2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 3.5 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 14 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Oral | 0.075 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 0.075 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.075 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Inhalation | 0.13 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 0.13 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 0.15 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.53 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Dermal | 0.6 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 2.1 mg/m ³ | Workers | Systemic |
| m-phenylenebis(methylamine) | DNEL | Long term Inhalation | 0.2 mg/m ³ | Workers | Local |
| | DNEL | Long term Dermal | 0.33 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 1.2 mg/m ³ | Workers | Systemic |
| Phenol, styrenated | DNEL | Long term Oral | 0.29 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 1.01 mg/m ³ | General population | Systemic |
| | DNEL | Long term Dermal | 1.46 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 2.92 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 4.11 mg/m ³ | Workers | Systemic |

PNECs

No PNECs available.

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

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

Individual protection measures

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.
Color : Light brown.
Odor : Characteristic.
Odor threshold : Not available.
Melting point/freezing point : Not available.
Initial boiling point and boiling range : Not available.
Flammability : Not available.
Upper/lower flammability or explosive limits : Not available.

SECTION 9: Physical and chemical properties

Flash point :

| Ingredient name | Closed cup | | | Open cup | | |
|--|------------|-------|----------------|----------|-------|--------|
| | °C | °F | Method | °C | °F | Method |
| 3-aminopropyltriethoxysilane | 93 | 199.4 | DIN 51758 | | | |
| benzyl alcohol | 100.56 | 213 | | | | |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | | | | 110 | 230 | |
| Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | >110 | >230 | | | | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) | 128 | 262.4 | | | | |
| m-phenylenebis(methylamine) | | | | 134 | 273.2 | |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | >200 | >392 | Pensky-Martens | | | |

Auto-ignition temperature :

| Ingredient name | °C | °F | Method |
|--|-----|-------|---------|
| 2,4,6-tris(dimethylaminomethyl)phenol | 382 | 719.6 | EU A.15 |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 401 | 753.8 | |
| benzyl alcohol | 436 | 816.8 | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) | 526 | 978.8 | |

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Not available.

Solubility(ies) :

Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/ water : Not applicable.

Vapor pressure :

| Ingredient name | Vapor Pressure at 20 °C | | | Vapor pressure at 50 °C | | |
|---|-------------------------|--------|----------|-------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| 2,4,6-tris(dimethylaminomethyl)phenol | 0.06 | 0.008 | EU A.4 | | | |
| benzyl alcohol | 0.05 | 0.0067 | | | | |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 0.01 | 0.0013 | OECD 104 | | | |
| m-phenylenebis(methylamine) | 0.01 | 0.0013 | OECD 104 | | | |
| Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine | 0 | 0 | | | | |

WEICON WL Epoxy Hardener

SECTION 9: Physical and chemical properties

| | |
|---------------------------------|---------------------------------------|
| Relative density | : Not available. |
| Density | : 1.1 g/cm ³ [20°C (68°F)] |
| Vapor density | : Not available. |
| Explosive properties | : Not available. |
| Oxidizing properties | : Not available. |
| <u>Particle characteristics</u> | |
| 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

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : No specific data. |
| 10.5 Incompatible materials | : No specific data. |
| 10.6 Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|------------------------------|-------------|---------|------------|----------|
| benzyl alcohol | LD50 Dermal | Rabbit | 2000 mg/kg | - |
| | LD50 Oral | Mouse | 1360 mg/kg | - |
| | LD50 Oral | Mouse | 1360 mg/kg | - |
| | LD50 Oral | Rabbit | 1040 mg/kg | - |
| | LD50 Oral | Rabbit | 1040 mg/kg | - |
| | LD50 Oral | Rat | 1.5 mL/kg | - |
| | LD50 Oral | Rat | 1230 mg/kg | - |
| | LD50 Oral | Rat | 1660 mg/kg | - |
| 3-aminopropyltriethoxysilane | LD50 Dermal | Rabbit | 4.29 g/kg | - |
| | LD50 Oral | Rat | 1.57 g/kg | - |

Conclusion/Summary : Not available.

Acute toxicity estimates

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SECTION 11: Toxicological information

| Route | ATE value |
|------------------------------|----------------|
| Oral | 1196.57 mg/kg |
| Dermal | 16030.57 mg/kg |
| Inhalation (vapors) | 188.59 mg/l |
| Inhalation (dusts and mists) | 4.63 mg/l |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|------------------------------|--------------------------|---------|-------|-----------------|-------------|
| benzyl alcohol | Skin - Mild irritant | Man | - | 48 hours 16 mg | - |
| | Skin - Moderate irritant | Pig | - | 100 % | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| 3-aminopropyltriethoxysilane | Skin - Severe irritant | Rabbit | - | 24 hours 5 mg | - |

Conclusion/Summary : Not available.

Sensitization

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : 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 : Harmful if inhaled.

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

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

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

SECTION 11: Toxicological information

| | |
|---------------------|--|
| 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 : 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.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|------------------------------------|---|----------|
| benzyl alcohol | Acute LC50 10000 µg/l Fresh water | Fish - <i>Lepomis macrochirus</i> | 96 hours |
| | Acute LC50 15000 µg/l Marine water | Fish - <i>Menidia beryllina</i> | 96 hours |
| | Acute LC50 460000 µg/l Fresh water | Fish - <i>Pimephales promelas</i> - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

SECTION 12: Ecological information

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|------|-----------|
| benzyl alcohol | 0.87 | - | Low |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine) | - | 4.77 | Low |
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 0.99 | - | Low |
| 3-aminopropyltriethoxysilane | 1.7 | 3.4 | Low |
| 2,4,6-tris(dimethylaminomethyl)phenol | 0.219 | - | Low |
| m-phenylenebis(methylamine) | 0.18 | 2.69 | Low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. 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 : The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

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

Packaging






SECTION 13: Disposal considerations

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) |
|-------------------|--|
| 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 | IMDG | IATA |
|--|--|--|--|
| 14.1 UN number | UN1760 | UN1760 | UN1760 |
| 14.2 UN proper shipping name | CORROSIVE LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylamine), 3-aminomethyl-3,5,5-trimethylcyclohexylamine) | CORROSIVE LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylamine), 3-aminomethyl-3,5,5-trimethylcyclohexylamine) | CORROSIVE LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis (methylamine), 3-aminomethyl-3,5,5-trimethylcyclohexylamine) |
| 14.3 Transport hazard class(es) | 8   | 8   | 8  |
| 14.4 Packing group | II | II | II |
| 14.5 Environmental hazards | Yes. Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | Yes. Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | 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)

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.

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SECTION 14: Transport information

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

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

| Product/ingredient name | % | Designation [Usage] |
|---------------------------|-----|---------------------|
| WEICON B4NV-Grey Hardener | ≥90 | 3 |

Labeling : Not applicable.

Other EU regulations

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

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

Ozone depleting substances (1005/2009/EU)

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 |

National regulations

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 : 2

Technical instruction on air quality control : TA-Luft Number 5.2.5: 54.7-82.9%
TA-Luft Class I - Number 5.2.5: 28-33%

SECTION 15: Regulatory information

AOX : The product contains organically bound halogens and can contribute to the AOX value in waste water.

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 : All components are listed or exempted. |
| Japan | : Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : Not determined. |
| Republic of Korea | : Not determined. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : Not determined. |
| Turkey | : Not determined. |
| United States | : Not determined. |
| Viet Nam | : All components are listed or exempted. |

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

🔍 Indicates information that has changed from previously issued version.

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

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

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SECTION 16: Other information

| Classification | Justification |
|--|--|
| Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| | |
|------|---|
| H302 | Harmful if swallowed. |
| 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. |
| H332 | Harmful if inhaled. |
| 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]

| | |
|---|---|
| Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Eye Dam. 1 Skin Corr. 1B Skin Corr. 1C Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1A Skin Sens. 1B | ACUTE TOXICITY - Category 4 AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 1C SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1A SKIN SENSITIZATION - Category 1B |
|---|---|

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