

# SAFETY DATA SHEET



WEICON Fire Safe Epoxy Resin

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

### 1.1 Product identifier

**Product name** : WEICON Fire Safe Epoxy Resin  
**UFI** : 3HWE-00UG-J002-GMQ1  
**Product code** : 170011  
**Color** : Off-white.  
**Product description** : Epoxy 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

Epoxy 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 Irrit. 2, H315  
Eye Irrit. 2, H319  
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** : 50.1 percent of the mixture consists of component(s) of unknown acute oral toxicity  
50.1 percent of the mixture consists of component(s) of unknown acute dermal toxicity  
50.1 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

## SECTION 2: Hazards identification

**Ingredients of unknown ecotoxicity** : Contains 50.1% 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** : Warning

**Hazard statements** : H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H411 - Toxic to aquatic life with long lasting effects.

#### Precautionary statements

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.  
P264 - Wash thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves. Wear eye or face protection.

**Response** :

P391 - Collect spillage.  
P362 + P364 - Take off contaminated clothing and wash it 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 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Storage** : Not applicable.

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

**Hazardous ingredients** : bis-[4-(2,3-epoxipropoxy)phenyl]propane; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol; 1,4-bis(2,3-epoxypropoxy)butane and Orange, sweet, ext.

**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.

WEICON Fire Safe Epoxy Resin

## SECTION 2: Hazards identification

**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
bis-[4-(2,3-epoxipropoxy)phenyl]propane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1] [2]
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	REACH #: 01-2119454392-40 EC: 701-263-0 CAS: 9003-36-5	≥10 - ≤25	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
1,4-bis(2,3 epoxypropoxy)butane	REACH #: 01-2119494060-45 EC: 219-371-7 CAS: 2425-79-8	≥1 - <3	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	ATE [Oral] = 1134 mg/kg ATE [Dermal] = 1130 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Orange, sweet, ext.	REACH #: 01-2119493353-35 EC: 232-433-8 CAS: 8028-48-6	≥0.1 - ≤0.3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411  <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

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

**Eye contact** : 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. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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.

## SECTION 4: First aid measures

- Skin contact** : 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Get medical attention if adverse health effects persist or are severe. 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. 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 or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- 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  
halogenated compounds

### 5.3 Advice for firefighters

## SECTION 5: Firefighting measures

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

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. 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 ingest. Avoid breathing vapor or mist. Avoid release to the environment. 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.

## SECTION 7: Handling and storage

### 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. 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

Product/ingredient name	Exposure limit values
bis-[4-(2,3-epoxipropoxy)phenyl]propane	<b>DFG MAC-values list (Germany, 7/2024)</b> Skin sensitizer.
1,4-bis(2,3 epoxypropoxy)butane	<b>DFG MAC-values list (Germany, 7/2024)</b> 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

bis-[4-(2,3-epoxipropoxy)phenyl]propane

##### Result

**DNEL - General population - Long term - Dermal**

89.3 µg/kg bw/day

Effects: Systemic

**DNEL - General population - Long term - Oral**

0.5 mg/kg bw/day

Effects: Systemic

**DNEL - Workers - Long term - Dermal**

0.75 mg/kg bw/day

Effects: Systemic

**DNEL - General population - Long term - Inhalation**

## SECTION 8: Exposure controls/personal protection

0.87 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**  
4.93 mg/m<sup>3</sup>  
Effects: Systemic

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

**DMEL - Workers - Short term - Dermal**  
8.3 µg/cm<sup>2</sup>  
Effects: Local

**DNEL - General population - Long term - Oral**  
6.25 mg/kg bw/day  
Effects: Systemic

**DNEL - General population - Long term - Inhalation**  
8.7 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**  
29.39 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - General population - Long term - Dermal**  
62.5 mg/kg bw/day  
Effects: Systemic

**DNEL - Workers - Long term - Dermal**  
104.15 mg/kg bw/day  
Effects: Systemic

1,4-bis(2,3 epoxypropoxy)butane

**DNEL - General population - Long term - Oral**  
0.33 mg/kg bw/day  
Effects: Systemic

**DNEL - General population - Long term - Inhalation**  
1.16 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - General population - Long term - Dermal**  
3.33 mg/kg bw/day  
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**  
4.7 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - Workers - Long term - Dermal**  
6.66 mg/kg bw/day  
Effects: Systemic

Orange, sweet, ext.

**DNEL - General population - Short term - Dermal**  
92.9 µg/cm<sup>2</sup>  
Effects: Local

**DNEL - Workers - Short term - Dermal**  
185.8 µg/cm<sup>2</sup>  
Effects: Local

**DNEL - General population - Long term - Oral**  
4.44 mg/kg bw/day  
Effects: Systemic

## SECTION 8: Exposure controls/personal protection

**DNEL - General population - Long term - Dermal**  
4.44 mg/kg bw/day  
Effects: Systemic

**DNEL - General population - Long term - Inhalation**  
7.78 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - Workers - Long term - Dermal**  
8.89 mg/kg bw/day  
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**  
31.1 mg/m<sup>3</sup>  
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/m<sup>3</sup>  
Effects: Local

**DNEL - General population - Long term - Inhalation**  
13 mg/m<sup>3</sup>  
Effects: Systemic

**DNEL - Workers - Long term - Inhalation**  
73 mg/m<sup>3</sup>  
Effects: Local

**DNEL - Workers - Long term - Inhalation**  
73 mg/m<sup>3</sup>  
Effects: Systemic

### PNECs

Not available.

### 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### 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.

#### Skin protection

## SECTION 8: Exposure controls/personal 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. [Pasty]
- Color** : Off-white.
- Odor** : Characteristic.
- 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
Distillates (petroleum), hydrotreated light	>23	>73.4				
Orange, sweet, ext.	50	122				
octamethylcyclotetrasiloxane	56	132.8				
bis-[4-(2,3-epoxypropoxy)phenyl] propane				79	174.2	
decamethylcyclopentasiloxane				82.7	180.9	ASTM D 3828-87
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	>93	>199.4	EU A.9			
2,6-di-tert-butyl-p-cresol				126.67	260	

WEICON Fire Safe Epoxy Resin

## SECTION 9: Physical and chemical properties

1,4-bis(2,3 epoxypropoxy)butane	140	284	DIN EN ISO 2719		
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**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
Orange, sweet, ext.	235	455	EU A.15
Distillates (petroleum), hydrotreated light	>220	>428	
decamethylcyclotetrasiloxane	372	701.6	ASTM E 659-78
octamethylcyclotetrasiloxane	384 to 387	723.2 to 728.6	ASTM E 659

**Decomposition temperature** : Not available.

**pH** : Not applicable.

**Viscosity** : 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
1,4-bis(2,3 epoxypropoxy)butane	<18.75	<2.5	EU A.4			
Orange, sweet, ext.	1.4	0.19				
octamethylcyclotetrasiloxane	0.99	0.13				
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	0.62	0.083	EU A.4			
decamethylcyclotetrasiloxane	0.25	0.033				
Distillates (petroleum), hydrotreated light	0.22502 to 0.45004	0.03 to 0.06				
2,6-di-tert-butyl-p-cresol	0.00825	0.0011				
1,1'-(ethane-1,2-diy)bis [pentabromobenzene]	0	0	OECD 104			

**Relative density** : Not available.

**Density** : 1.6 g/cm<sup>3</sup> [21°C (69.8°F)]

**Relative vapor density** : Not available.

### 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

Not applicable.

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## 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**

1,4-bis(2,3 epoxypropoxy)butane

##### **Result**

##### **Rat - Oral - LD50**

1134 mg/kg

Toxic effects: Eye - Other Behavioral - Somnolence (general depressed activity) Other - Hair

##### **Rabbit - Dermal - LD50**

1130 mg/kg

octamethylcyclotetrasiloxane

##### **Rat - Inhalation - LC50 Vapor**

36 g/m<sup>3</sup> [4 hours]

Toxic effects: Behavioral - Excitement Lung, Thorax, or Respiration - Dyspnea Other - Hair

**Conclusion/Summary [Product]** : Not available.

#### Acute toxicity estimates

<b>Product/ingredient name</b>	<b>Oral (mg/kg)</b>	<b>Dermal (mg/kg)</b>	<b>Inhalation (gases) (ppm)</b>	<b>Inhalation (vapors) (mg/l)</b>	<b>Inhalation (dusts and mists) (mg/l)</b>
WEICON Fire Safe Epoxy Resin	26688.4	26594.2	N/A	258.9	N/A
1,4-bis(2,3 epoxypropoxy)butane	1134	1130	N/A	11	N/A

#### Skin corrosion/irritation

##### **Product/ingredient name**

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

##### **Result**

##### **Rabbit - Skin - Mild irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 uL

1,4-bis(2,3 epoxypropoxy)butane

##### **Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 10 mg

**Conclusion/Summary [Product]** : Not available.

#### Serious eye damage/eye irritation

## SECTION 11: Toxicological information

### Product/ingredient name

1,4-bis(2,3 epoxypropoxy)butane

### Result

**Rabbit - Eyes - Moderate irritant**

Amount/concentration applied: 100 mg

**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

#### Product/ingredient name

Orange, sweet, ext.

#### Result

ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

## SECTION 11: Toxicological information

**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 or irritation  
watering  
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Ingestion** : No specific data.

### 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]

Effect: Population

##### Chronic - NOEC - Fresh water

## SECTION 12: Ecological information

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 <sub>ow</sub>	BCF	Potential
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	2.7	-	Low
1,4-bis(2,3 epoxypropoxy) butane	-0.269	-	Low
Orange, sweet, ext.	2.78 to 4.88	1.502 to 2.597	Low

### 12.4 Mobility in soil

#### Soil/Water partition coefficient

Product/ingredient name	logK <sub>oc</sub>	K <sub>oc</sub>
bis-[4-(2,3-epoxipropoxy)phenyl]propane	4	10465.7
1,4-bis(2,3 epoxypropoxy)butane	1.3	22.3008
octamethylcyclotetrasiloxane	3.5	3064.9

#### Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
bis-[4-(2,3-epoxipropoxy)phenyl]propane	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No	No	No	No	No	No	No
1,4-bis(2,3 epoxypropoxy) butane	No	No	No	No	No	No	No
Orange, sweet, ext.	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]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
bis-[4-(2,3-epoxipropoxy)phenyl]propane	No	N/A	N/A	No	N/A	N/A	N/A
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No	N/A	N/A	No	N/A	N/A	N/A
1,4-bis(2,3 epoxypropoxy) butane	No	N/A	N/A	No	N/A	N/A	N/A

WEICON Fire Safe Epoxy Resin

## SECTION 12: Ecological information

Orange, sweet, ext. octamethylcyclotetrasiloxane	No Yes	N/A Yes	No Yes	No Yes	No Yes	N/A Yes	No Yes
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### Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
bis-[4-(2,3-epoxypropoxy) phenyl]propane	No						
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No						
1,4-bis(2,3 epoxypropoxy) butane	No						
Orange, sweet, ext. octamethylcyclotetrasiloxane	No No						

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

### 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)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### Packaging

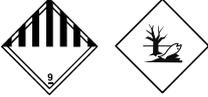
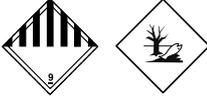
**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Can	15 01 10* packaging containing residues of or contaminated by hazardous substances

## SECTION 13: Disposal considerations

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	UN3082	UN3082	UN3082	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxy)phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol)
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 	9 
<b>14.4 Packing group</b>	III	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.	Yes.

### Additional information

**ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**Tunnel code** (-)

**ADN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

**IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

**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]
WEICON Fire Safe Epoxy Resin	≥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** : 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 is controlled under the Seveso Directive.

###### Danger criteria

Category
E2

**VOC content** : 0.44 %

**VOC (g/L)** : 7

##### National regulations

## SECTION 15: Regulatory information

**Storage class (TRGS 510) :** 12

### 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	50.1
5.2.5	Organic substances	54.1
5.2.5 [I]	Organic substances	0.19

**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

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: All components are listed or exempted.
<b>Eurasian Economic Union</b>	: <b>Russian Federation inventory:</b> All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (CSCL):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: All components are listed or exempted.
<b>Turkey</b>	: All components are listed or exempted.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: 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

: 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 Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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

WEICON Fire Safe Epoxy Resin

## SECTION 16: Other information

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - 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. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITIZATION - Category 1

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