

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.10.2015

Version number 1

Revision: 29.10.2015

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

#### - 1.1 Product identifier

- Trade name: ergo 7387

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

No further relevant information available.

- Application of the substance / the mixture Thickening agent

#### - 1.3 Details of the supplier of the safety data sheet

##### - Manufacturer/Supplier:

Kisling AG

Motorenstrasse 102

CH-8620 Wetzikon

Telefon: +41-(0) 58-272 0 272

Telefax: +41-(0) 58-272 0 273

- Further information obtainable from: Safety Department

- Department issuing MSDS: ergo@kisling.com

- 1.4 Emergency telephone number: Swiss Toxicological Information Centre: +41-(0) 44-2 51 51 51

### SECTION 2: Hazards identification

#### - 2.1 Classification of the substance or mixture

##### - Classification according to Regulation (EC) No 1272/2008

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

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##### - Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not applicable

Xn; Harmful

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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##### - Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

##### - Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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#### - 2.2 Label elements

##### - Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

##### - Hazard pictograms



GHS08

- Signal word Warning

##### - Hazard-determining components of labelling:

quartz (SiO<sub>2</sub>)

##### - Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.

##### - Precautionary statements

P260 Do not breathe dust.

P285 In case of inadequate ventilation wear respiratory protection.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

#### - Dangerous components:

CAS: 14808-60-7 EINECS: 238-878-4	quartz (SiO <sub>2</sub> )	Xn R48/20 STOT RE 2, H373	25-<100%
CAS: 12001-26-2 EC number: 310-127-6	mica	substance with a Community workplace exposure limit	25-<100%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** After contact with skin, wash with plenty of soap and water.
- **After eye contact:**  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Avoid formation of dust.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.

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Inform respective authorities in case of seepage into water course or sewage system.

**- 6.3 Methods and material for containment and cleaning up:**

- Ensure adequate ventilation.
- Pick up mechanically.
- Flush away residues with plenty of water.
- Dispose contaminated material as waste according to item 13.

**- 6.4 Reference to other sections**

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 10 for information on "stability and reactivity".
- See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Prevent formation of dust.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

**- 8.1 Control parameters**

**- Ingredients with limit values that require monitoring at the workplace:**

<b>14808-60-7 quartz (SiO<sub>2</sub>)</b>	
MAK (Switzerland)	Long-term value: 0,15 a mg/m <sup>3</sup> P C <sub>1</sub> SSc;
<b>12001-26-2 mica</b>	
MAK (Switzerland)	Long-term value: 3 a mg/m <sup>3</sup>

- **Additional information:** The lists valid during the making were used as basis.

**- 8.2 Exposure controls**

**- Personal protective equipment:**

**- General protective and hygienic measures:**

- The usual precautionary measures are to be adhered to when handling chemicals.
- Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.
- Do not inhale dust / smoke / mist.

**- Respiratory protection:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**- Protection of hands:**

- Protective gloves on prolonged contact with skin.
- Check protective gloves prior to each use for their proper condition.
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**- Material of gloves**

- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the

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resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**- Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**- Eye protection:** Not required.

**- Body protection:** Use protective suit.

### SECTION 9: Physical and chemical properties

**- 9.1 Information on basic physical and chemical properties**

**- General Information**

**- Appearance:**

**Form:** Powder

**Colour:** White

**- Odour:** Odourless

**- Odour threshold:** Not determined.

**- pH-value:** Not applicable.

**- Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**- Flash point:** Not applicable.

**- Flammability (solid, gaseous):** Not determined.

**- Ignition temperature:**

**Decomposition temperature:** Not determined.

**- Self-igniting:** Product is not self-igniting.

**- Danger of explosion:** Product does not present an explosion hazard.

**- Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**- Vapour pressure:** Not applicable.

**- Density at 20 °C:** 2,6 g/cm<sup>3</sup>

**- Relative density** Not determined.

**- Vapour density** Not applicable.

**- Evaporation rate** Not applicable.

**- Solubility in / Miscibility with water:**

Insoluble.

**- Partition coefficient (n-octanol/water):** Not determined.

**- Viscosity:**

**Dynamic:** Not applicable.

**Kinematic:** Not applicable.

**- 9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

**- 10.1 Reactivity** No further relevant information available.

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- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
No dangerous reactions if used and stored according to specifications.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
No dangerous products of decomposition if used and stored according to specifications.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**  
No experimentally found toxicological data are available for this preparation.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**  
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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#### SECTION 14: Transport information

- 14.1 UN-Number - ADR, IMDG, IATA	Void
- 14.2 UN proper shipping name - ADR, IMDG, IATA	Void
- 14.3 Transport hazard class(es) - ADR, ADN, IMDG, IATA - Class	Void
- 14.4 Packing group - ADR, IMDG, IATA	Void
- 14.5 Environmental hazards:	Not applicable.
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
- UN "Model Regulation":	Void

#### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

##### - Relevant phrases

H373 May cause damage to organs through prolonged or repeated exposure.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

##### - Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

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#### - 1.1 Product identifier

- Trade name: ergo 7388

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

No further relevant information available.

#### - Application of the substance / the mixture

epoxy casting resin

Resin

#### - 1.3 Details of the supplier of the safety data sheet

##### - Manufacturer/Supplier:

Kisling AG

Motorenstrasse 102

CH-8620 Wetzikon

Telefon: +41-(0) 58-272 0 272

Telefax: +41-(0) 58-272 0 273

- Further information obtainable from: Safety Department

- Department issuing MSDS: ergo@kisling.com

- 1.4 Emergency telephone number: Swiss Toxicological Information Centre: +41-(0) 44-2 51 51 51

### SECTION 2: Hazards identification

#### - 2.1 Classification of the substance or mixture

##### - Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

##### - Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not applicable

Xi; Irritant

R38: Irritating to skin.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### - Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

##### - Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

#### - 2.2 Label elements

##### - Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

##### - Hazard pictograms



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- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (BPFEDGE)
- **Hazard statements**  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P262 Do not get in eyes, on skin, or on clothing.  
P273 Avoid release to the environment.  
P264 Wash thoroughly after handling.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- **Additional information:**  
EUH205 Contains epoxy constituents. May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Adhesive

#### - **Dangerous components:**

CAS: 9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (BPFEDGE)	25-<100%
NLP: 500-006-8	Xi R38; Xi R43; N R51/53	
Index number: 603-074-00-8		
Reg.nr.: 01-2119454392-40-xxxx	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Remove any clothing soiled by the product.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
After contact with skin, wash immediately with plenty of soap and water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
If swallowed, do not induce vomiting; seek medical advice and show this container or label.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

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#### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

#### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 10 for information on "stability and reactivity".  
See Section 13 for disposal information.

#### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Store receptacle in a well ventilated area.
- **7.3 Specific end use(s)** No further relevant information available.

#### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.

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**- 8.2 Exposure controls****- Personal protective equipment:****- General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Clean skin thoroughly immediately after handling the product.

**- Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A/P2

**- Protection of hands:**

Protective gloves (EN 374)

Check protective gloves prior to each use for their proper condition.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**- Material of gloves**

Butyl rubber - IIR: thickness  $\geq 0,5$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**- Penetration time of glove material**

Permeation time / penetration time: = 480 minutes (DIN EN 374):

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**- Eye protection:** Safety glasses**SECTION 9: Physical and chemical properties****- 9.1 Information on basic physical and chemical properties****- General Information****- Appearance:**

**Form:** Fluid

**Colour:** Green

**- Odour:** Nearly odourless

**- Odour threshold:** Not determined.

**- pH-value:** Not determined.

**- Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**- Flash point:**  $> 93$  °C

**- Flammability (solid, gaseous):** Not applicable.

**- Ignition temperature:**

**Decomposition temperature:** Not determined.

**- Self-igniting:** Product is not self-igniting.

**- Danger of explosion:** Product does not present an explosion hazard.

**- Explosion limits:**

**Lower:** Not determined.

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<b>Upper:</b>	Not determined.
- <b>Vapour pressure:</b>	Not determined.
- <b>Density at 20 °C:</b>	1,16 g/cm <sup>3</sup>
- <b>Relative density</b>	Not determined.
- <b>Vapour density</b>	Not determined.
- <b>Evaporation rate</b>	Not determined.
- <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
- <b>Partition coefficient (n-octanol/water):</b>	Not determined.
- <b>Viscosity:</b>	
<b>Dynamic at 25 °C:</b>	2400 - 4500 mPas
<b>Kinematic:</b>	Not determined.
- <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with amines.  
Reacts with acids.  
Reacts with alkali (lyes).
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
No dangerous products of decomposition if used and stored according to specifications.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**  
May cause an allergic skin reaction.
- **Additional toxicological information:**  
No experimentally found toxicological data are available for this preparation.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

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#### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Danger to drinking water if even small quantities leak into the ground.  
Do not allow product to reach ground water, water course or undiluted sewage system.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

#### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

#### SECTION 14: Transport information

- |   |   |
|---|---|
| - <b>14.1 UN-Number</b>   | UN3082  |
| - <b>ADR, IMDG, IATA</b>  | UN3082  |
| - <b>14.2 UN proper shipping name</b>   | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F epoxy resin)              |
| - <b>ADR</b>  | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F epoxy resin)              |
| - <b>IMDG</b>   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F epoxy resin), MARINE POLLUTANT |
| - <b>IATA</b>   | Environmentally hazardous substance, liquid, n.o.s. (Bisphenol F epoxy resin)                   |
| - <b>14.3 Transport hazard class(es)</b>  |   |
| - <b>ADR</b>  |   |
|  |   |
| - <b>Class</b>  | 9 (M6) Miscellaneous dangerous substances and articles.   |

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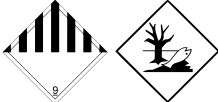
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- Label	9
-----	
- IMDG, IATA	
	
- Class	9 Miscellaneous dangerous substances and articles.
- Label	9
- 14.4 Packing group	
- ADR, IMDG, IATA	III
- 14.5 Environmental hazards:	
- Marine pollutant:	Symbol (fish and tree)
- Special marking (ADR):	Symbol (fish and tree)
- Special marking (IATA):	Symbol (fish and tree)
- 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
- Danger code (Kemler):	iii
- EMS Number:	F-A,S-F
- Stowage Category	A
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
-----	
- Transport/Additional information:	
- ADR	
- Limited quantities (LQ)	5L
- Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- Transport category	3
- Tunnel restriction code	E
- UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL F EPOXY RESIN), 9, III

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H411 Toxic to aquatic life with long lasting effects.
- R38 Irritating to skin.

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R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**- Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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

#### - 1.1 Product identifier

- Trade name: ergo 7389

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

No further relevant information available.

#### - Application of the substance / the mixture

epoxy casting resin

Hardening agent/ Curing agent

#### - 1.3 Details of the supplier of the safety data sheet

##### - Manufacturer/Supplier:

Kisling AG

Motorenstrasse 102

CH-8620 Wetzikon

Telefon: +41-(0) 58-272 0 272

Telefax: +41-(0) 58-272 0 273

- Further information obtainable from: Safety Department

- Department issuing MSDS: ergo@kisling.com

- 1.4 Emergency telephone number: Swiss Toxicological Information Centre: +41-(0) 44-2 51 51 51

### SECTION 2: Hazards identification

#### - 2.1 Classification of the substance or mixture

##### - Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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##### - Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not applicable

C; Corrosive

R34: Causes burns.

Xn; Harmful

R21/22: Harmful in contact with skin and if swallowed.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

---

##### - Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

##### - Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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#### - 2.2 Label elements

##### - Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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**- Hazard pictograms**

GHS05 GHS07

**- Signal word** Danger**- Hazard-determining components of labelling:**

3-aminomethyl-3,5,5-trimethylcyclohexylamine  
trimethylhexane-1,6-diamine

**- Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

**- Precautionary statements**

P260 Do not breathe vapours.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**- 2.3 Other hazards****- Results of PBT and vPvB assessment****- PBT:** Not applicable.**- vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****- 3.2 Mixtures****- Description:** Adhesive**- Dangerous components:**

CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9	3-aminomethyl-3,5,5-trimethylcyclohexylamine C R34; Xn R21/22; Xi R43 R52/53	25-<100%
	Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
CAS: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine C R34; Xn R22; Xi R43 R52/53	25-<100%
	Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	

**- Additional information:** For the wording of the listed risk phrases refer to section 16.**SECTION 4: First aid measures****- 4.1 Description of first aid measures****- General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
After contact with skin, wash immediately with plenty of soap and water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of the material collected according to regulations.  
Use neutralising agent.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 10 for information on "stability and reactivity".  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store only in the original receptacle.  
Provide alkali-resistant floor.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Maximum storage temperature:** 40 °C
- **Minimum storage temperature:** 2 °C
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Do not inhale gases / fumes / aerosols.
- **Respiratory protection:**  
Use suitable respiratory protective device in case of insufficient ventilation.  
Filter A/P2
- **Protection of hands:**  
Protective gloves (EN 374)  
Check protective gloves prior to each use for their proper condition.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles
- **Body protection:** Use protective suit.

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### SECTION 9: Physical and chemical properties

#### - 9.1 Information on basic physical and chemical properties

##### - General Information

##### - Appearance:

Form: Fluid  
Colour: Colourless

- Odour: Amine-like

- Odour threshold: Not determined.

- pH-value: Not determined.

##### - Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not applicable.

##### - Ignition temperature:

Decomposition temperature: Not determined.

- Self-igniting: Product is not self-igniting.

- Danger of explosion: Product does not present an explosion hazard.

##### - Explosion limits:

Lower: Not determined.

Upper: Not determined.

- Vapour pressure: Not determined.

- Density at 20 °C: 0,87 g/cm<sup>3</sup>

- Relative density: Not determined.

- Vapour density: Not determined.

- Evaporation rate: Not determined.

##### - Solubility in / Miscibility with water:

Not miscible or difficult to mix.

- Partition coefficient (n-octanol/water): Not determined.

##### - Viscosity:

Dynamic at 20 °C: 5 - 10 mPas

Kinematic: Not determined.

##### - 9.2 Other information

No further relevant information available.

### SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.

##### - 10.2 Chemical stability

##### - Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- 10.3 Possibility of hazardous reactions Strong exothermic reaction with acids.

- 10.4 Conditions to avoid No further relevant information available.

- 10.5 Incompatible materials: No further relevant information available.

##### - 10.6 Hazardous decomposition products:

No dangerous products of decomposition if used and stored according to specifications.

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### SECTION 11: Toxicological information

#### - 11.1 Information on toxicological effects

##### - Acute toxicity

Harmful if swallowed or in contact with skin.

##### - LD/LC50 values relevant for classification:

25620-58-0 trimethylhexane-1,6-diamine

Oral | LD50 | 910 mg/kg (rat)

##### - Primary irritant effect:

##### - Skin corrosion/irritation

Causes severe skin burns and eye damage.

##### - Serious eye damage/irritation

Causes serious eye damage.

##### - Respiratory or skin sensitisation

May cause an allergic skin reaction.

##### - Additional toxicological information:

No experimentally found toxicological data are available for this preparation.

##### - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

- **Reproductive toxicity** Based on available data, the classification criteria are not met.

- **STOT-single exposure** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### - 12.1 Toxicity

##### - Aquatic toxicity:

25620-58-0 trimethylhexane-1,6-diamine

EC50/24 h | 31,5 mg/l (DA)

EC50/72 h | 29,5 mg/l (Algae)

- **12.2 Persistence and degradability** No further relevant information available.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

##### - Ecotoxicological effects:

- **Remark:** Harmful to fish

##### - Additional ecological information:

##### - General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Danger to drinking water if even small quantities leak into the ground.

Do not allow product to reach ground water, water course or undiluted sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Harmful to aquatic organisms

##### - 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

#### - 13.1 Waste treatment methods

- **Recommendation** Disposal must be made according to official regulations.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- 14.1 UN-Number	UN2735
- ADR, IMDG, IATA	UN2735
- 14.2 UN proper shipping name	2735 AMINES, LIQUID, CORROSIVE, N.O.S. ( I S O P H O R O N E D I A M I N E , TRIMETHYLHEXAMETHYLENEDIAMINES)
- ADR	2735 AMINES, LIQUID, CORROSIVE, N.O.S. ( I S O P H O R O N E D I A M I N E , TRIMETHYLHEXAMETHYLENEDIAMINES)
- IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. ( I S O P H O R O N E D I A M I N E , TRIMETHYLHEXAMETHYLENEDIAMINES)
- IATA	Amines, liquid, corrosive, n.o.s. (Isophoronediamine, Trimethylhexamethylenediamines)
- 14.3 Transport hazard class(es)	
- ADR	
	
- Class	8 (C7) Corrosive substances.
- Label	8
-----	
- IMDG, IATA	
	
- Class	8 Corrosive substances.
- Label	8
- 14.4 Packing group	II
- ADR, IMDG, IATA	II
- 14.5 Environmental hazards:	Not applicable.
- 14.6 Special precautions for user	Warning: Corrosive substances.
- Danger code (Kemler):	80
- EMS Number:	F-A,S-B
- Segregation groups	Alkalis
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
-----	
- Transport/Additional information:	
- ADR	
- Limited quantities (LQ)	1L
- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- Transport category	2

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- Tunnel restriction code	E
- UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. ( I S O P H O R O N E D I A M I N E , TRIMETHYLHEXAMETHYLENEDIAMINES), 8, II

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### - Relevant phrases

- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H412 Harmful to aquatic life with long lasting effects.
- R21/22 Harmful in contact with skin and if swallowed.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R43 May cause sensitisation by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### - Abbreviations and acronyms:

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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