

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

Printing date 19.05.2015

Version number 1

Revision: 19.05.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking**- 1.1 Product identifier****- Trade name: ergo 7374****- 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.

Skin Corr. 1A 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 2 H411 Toxic to aquatic life with long lasting effects.

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

C; Corrosive

R34: Causes burns.

Xn; Harmful

R22: Harmful if swallowed.

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.

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- Hazard pictograms

GHS05 GHS07 GHS09

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

trimethylhexane-1,6-diamine

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

- Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

- Precautionary statements

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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.

P310 Immediately call a POISON CENTER/doctor.

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

- 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: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine C R34; Xn R22; Xi R43 R52/53 ----- Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-<100%
Reg.nr.: 01-2119557899-12-xxxx	Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia C R34; Xi R41; N R51/53 ----- Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Chronic 2, H411	25-<100%
CAS: 10563-29-8 EINECS: 234-148-4	N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine C R35; Xn R21/22; Xi R43 ----- Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	5-<10%

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

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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.

- 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:

CO₂, 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

Cool endangered receptacles with water spray.

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

Keep away from ignition sources.

- 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.

Ensure adequate ventilation.

- 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".

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See Section 13 for disposal information.

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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.

- 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:** 15 °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.

- 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.

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- 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.**SECTION 9: Physical and chemical properties****- 9.1 Information on basic physical and chemical properties****- General Information****- Appearance:**

Form:	Fluid
Colour:	Yellow
	Transparent

- Odour: Characteristic**- 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:** 0,85 g/cm³**- 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 25 °C:** ~ 10 mPas**Kinematic:** Not determined.**- 9.2 Other information** No further relevant information available.**SECTION 10: Stability and reactivity****- 10.1 Reactivity****- 10.2 Chemical stability****- Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

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- **10.3 Possibility of hazardous reactions**
Strong exothermic reaction with acids.
Reacts with strong oxidising agents.
- **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

- LD/LC50 values relevant for classification:

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

Oral	LD50	910 mg/kg (rat)
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10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

Oral	LD50	1670 mg/kg (rat)
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Dermal	LD50	1310 mg/kg (rab)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation** Strong caustic effect.
- **Respiratory or skin sensitisation** possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.
No experimentally found toxicological data are available for this preparation.

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

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

EC50/24 h	31,5 mg/l (DA)
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EC50/72 h	29,5 mg/l (Algae)
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- **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.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- 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

- 14.1 UN-Number

- ADR, IMDG, IATA

UN2735

- 14.2 UN proper shipping name

- ADR

2735 AMINES, LIQUID, CORROSIVE, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIMETHYLHEXAMETHYLENEDIAMINES), ENVIRONMENTALLY HAZARDOUS

- IMDG

AMINES, LIQUID, CORROSIVE, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIMETHYLHEXAMETHYLENEDIAMINES), MARINE POLLUTANT

- IATA

AMINES, LIQUID, CORROSIVE, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIMETHYLHEXAMETHYLENEDIAMINES)

- 14.3 Transport hazard class(es)

- ADR



- Class

8 (C7) Corrosive substances.

- Label

8

- IMDG



- Class

8 Corrosive substances.

- Label

8

- IATA



- Class

8 Corrosive substances.

- Label

8

- 14.4 Packing group

- ADR, IMDG, IATA

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- 14.5 Environmental hazards:

- | | |
|---------------------------------|-------------------------------|
| - Marine pollutant: | Yes
Symbol (fish and tree) |
| - Special marking (ADR): | Symbol (fish and tree) |

- | | |
|--|--------------------------------|
| - 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 MARPOL73/78 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 |
| - Tunnel restriction code | E |

- | | |
|---------------------------------|--|
| - UN "Model Regulation": | UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, TRIMETHYLHEXAMETHYLENEDIAMINES), 8, II, ENVIRONMENTALLY HAZARDOUS |
|---------------------------------|--|

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.
- H411 Toxic to aquatic life with long lasting effects.
- 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.
- R35 Causes severe burns.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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- 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

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

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

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

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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