

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.03.2015

Version number 1

Revision: 20.03.2015

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

- 1.1 Product identifier

- Trade name: ergo 1470

- 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 Adhesives

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

KISLING DEUTSCHLAND GmbH

Drillberg

D-97980 Bad Mergentheim

Telefon: +49-(0) 791-407 27-0

Telefax: +49-(0) 791-407 27-50

- 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.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

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

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

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.

- 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



GHS07

- Signal word Warning

- Hazard-determining components of labelling:

2-hydroxyethyl methacrylate

triethylene-glycol-dimethacrylate

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- Hazard statements

- H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.

- Precautionary statements

- P261 Avoid breathing vapours.
 P280 Wear protective gloves / eye protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 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: 868-77-9 EINECS: 212-782-2 Index number: 607-124-00-X	2-hydroxyethyl methacrylate Xi R36/38; Xi R43 ----- Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-<100%
CAS: 20882-04-6 EINECS: 244-096-4	{2-[(2-methyl-1-oxoallyl)oxy]ethyl} hydrogen succinate Xi R36/38 ----- Skin Irrit. 2, H315; Eye Irrit. 2, H319	3-<10%
CAS: 80-15-9 EINECS: 201-254-7 Index number: 617-002-00-8	α,α -dimethylbenzyl hydroperoxide T R23; C R34; Xn R21/22-48/20/22; O R7; N R51/53 ----- Org. Perox. EF, H242; Acute Tox. 3, H331; STOT RE 2, H373; Skin Corr. 1B, H314; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312	1-<2,5%
CAS: 109-16-0 EINECS: 203-652-6 Reg.nr.: 01-2119969287-21-xxxx	triethylene-glycol-dimethacrylate Xi R43 ----- Skin Sens. 1, H317	1-<3%
CAS: 98-82-8 EINECS: 202-704-5 Index number: 601-024-00-X	isopropylbenzene Xn R65; Xi R37; N R51/53 R10 ----- Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335	0,3-<1%
CAS: 102-82-9 EINECS: 203-058-7	tributylamine T R23/24; Xn R22; Xi R38 ----- Acute Tox. 3, H311; Acute Tox. 2, H330; Acute Tox. 4, H302; Skin Irrit. 2, H315	0,3-<1%
CAS: 123-31-9 EINECS: 204-617-8 Index number: 604-005-00-4	1,4-dihydroxybenzene Xn R22-40-68; Xi R41; Xi R43; N R50 Carc. Cat. 3, Muta. Cat. 3 ----- Muta. 2, H341; Carc. 2, H351; Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Sens. 1, H317	<0,1%

- 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:** 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.

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.
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide
Danger of forming toxic pyrolysis products.
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **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
- **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".

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See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:**
No special precautions are necessary if used and stored according to specifications.
- **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.
Protect from heat and direct sunlight.
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:	
868-77-9 2-hydroxyethyl methacrylate	
MAK (Germany)	vgl.Abschn.IIb
80-15-9 α,α-dimethylbenzyl hydroperoxide	
MAK (Germany)	als Dampf und Aerosol;vgl.Abschn.Xa
109-16-0 triethylene-glycol-dimethacrylate	
MAK (Germany)	vgl.Abschn.IV
102-82-9 tributylamine	
MAK (Germany)	als Dampf und Aerosol;vgl.Abschn.IIb

- **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.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
Find below a list of appropriate protective gloves for chemical surrounding:
.
Permeation time / penetration time: = 480 minutes(DIN EN 374):
Naturlatex I , Nr. 0395 oder 0403

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Chloropren Nitril II, Nr. 0717
 Chloropren Nitril I, Nr. 0727
 Nitril I, Nr. 0728, 0730, 0732, 0733, 0736, 0737, 0738, 0739 oder 0836
 Nitril VI, Nr. 0754
 Nitril V, Nr. 0764
 Viton, Nr. 0890
 Butyl II, Nr. 0897
 Butyl, Nr. 0898

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 of KCL company (e-mail: vertrieb@kcl.de).

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 The recommendation is based exclusively on the chemical compatibility and the test according to EN374 under laboratory conditions.

Requirements can vary according to the use. Therefore, please always take into account the glove supplier's recommendations.

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 trough 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: Characteristic

- Odour threshold: Not determined.

- pH-value: Not determined.

- Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

- Flash point: > 90 °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.

Upper: Not determined.

- Vapour pressure: Not determined.

- Density at 25 °C: 1,04 - 1,08 g/cm³

- Relative density Not determined.

- Vapour density Not determined.

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- 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:	50 - 70 mPas (Brookfield (2/100))
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.
Protect from heat and direct sunlight.
- **10.3 Possibility of hazardous reactions** Reacts with metal-salts.
- **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:

868-77-9 2-hydroxyethyl methacrylate

Oral	LD50	5050 mg/kg (rat)
Dermal	LD50	3000 mg/kg (rab)

80-15-9 α,α -dimethylbenzyl hydroperoxide

Oral	LD50	382 mg/kg (rat)
Dermal	LD50	500 mg/kg (rat)
Inhalative	LC50/4 h	220 mg/l (rat)

98-82-8 isopropylbenzene

Oral	LD50	1400 mg/kg (rat)
Dermal	LD50	10 600 - 12 300 mg/kg (rbt)
Inhalative	LC50/4 h	24,7 mg/l (mus)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Causes serious eye irritation.
- **Sensitisation:** 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:

Irritant

No experimentally found toxicological data are available for this preparation.

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SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:	
868-77-9 2-hydroxyethyl methacrylate	
LC50/96 h	213 - 242 mg/l (Pimephales promelas)
98-82-8 isopropylbenzene	
EC50/72 h	2,6 mg/l (Algae)
LC50/96 h	2,7 - 6,32 mg/l (-)

- **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.

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.

- Uncleaned packaging:

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

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 MARPOL73/78 and the IBC Code	Not applicable.
- UN "Model Regulation":	-

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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**

- | | |
|-----------|--|
| H226 | Flammable liquid and vapour. |
| H242 | Heating may cause a fire. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H335 | May cause respiratory irritation. |
| H341 | Suspected of causing genetic defects. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| | |
| R10 | Flammable. |
| R21/22 | Harmful in contact with skin and if swallowed. |
| R22 | Harmful if swallowed. |
| R23 | Toxic by inhalation. |
| R23/24 | Toxic by inhalation and in contact with skin. |
| R34 | Causes burns. |
| R36/38 | Irritating to eyes and skin. |
| R37 | Irritating to respiratory system. |
| R38 | Irritating to skin. |
| R40 | Limited evidence of a carcinogenic effect. |
| R41 | Risk of serious damage to eyes. |
| R43 | May cause sensitisation by skin contact. |
| R48/20/22 | Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. |
| R50 | Very toxic to aquatic organisms. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R65 | Harmful: may cause lung damage if swallowed. |
| R68 | Possible risk of irreversible effects. |
| R7 | May cause fire. |

- **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

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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
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Org. Perox. EF: Organic Peroxides, Types E, F
Acute Tox. 4: Acute toxicity, Hazard Category 4
Acute Tox. 2: Acute toxicity, Hazard Category 2
Acute Tox. 3: Acute toxicity, Hazard Category 3
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Muta. 2: Germ cell mutagenicity, Hazard Category 2
Carc. 2: Carcinogenicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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