26.08.2021 Kit Components	
Product code	Description
7390-200825	ergo 7390
Components:	
7388-200407	ergo 7388 - Component A ergo 7390
7389-200825	ergo 7389 - Component B ergo 7390



Page 1/8

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

Printing date 26.08.2021 Version number 4 Revision: 26.08.2021

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

- 1.1 Product identifier
- Trade name: ergo 7388 Component A ergo 7390
- 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

Epoxy resin adhesive

- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Kisling AG

Motorenstrasse 102

CH-8620 Wetzikon

Tel: +41-58-272 0 272

- Only representative (REACH) and importer (CLP):

Kisling Deutschland GmbH

Salzstraße 15

D-74676 Niedernhall

Tel +49 8171 99982 30

- Further information obtainable from: Product safety department
- Department issuing MSDS: ergo@kisling.com
- 1.4 Emergency telephone number: +49-700-24 112 112 (KAR)

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.

- 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

GHS09

- Signal word Warning
- Hazard-determining components of labelling:

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

- Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

- Precautionary statements

P261 Avoid breathing mist/vapours/spray. P264 Wash thoroughly after handling.

(Contd. on page 2)

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(Contd. of page 1)

P273 Avoid release to the environment.

P280 Wear protective gloves.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

- 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-	> 50 - ≤ 100%
NLP: 500-006-8	chloro-2,3-epoxypropane and phenol (BPFDGE)	
Index number: 603-074-00-8	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens.	
Reg.nr.: 01-2119454392-40-xxxx	1, H317	

- Additional information: For the wording of the listed hazard 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.

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.

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Trade name: ergo 7388 - Component A ergo 7390

(Contd. of page 2)

- 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:

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

Do not allow product to reach sewage system or any water course.

- 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.

- Storage class (TRGS 510, Storage of hazardous substances in non-stationary containers): 10-13
- -7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Clean skin thoroughly immediately after handling the product.

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Trade name: ergo 7388 - Component A ergo 7390

(Contd. of page 3)

- 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 $\geq 0.5 \text{ mm}$

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 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 propertion	SECTION 9	: Physical a	and chemical	properties
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- 9.1 Information on basic physical and	chemical properties
- General Information	
- Appearance:	
Form:	Fluid
Colour:	Colourless
- Odour:	Nearly odourless
- Odour threshold:	Not determined.
- pH-value:	Not determined.
- Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling rang	e: Undetermined.
- Flash point:	> 93 °C
- Flammability (solid, gas):	Not applicable.
- Decomposition temperature:	Not determined.
- Auto-ignition temperature:	Product is not self-igniting.
- Explosive properties:	Product does not present an explosion hazard.
- Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
- Oxidising properties	Not determined.
- Vapour pressure:	Not determined.
- Density at 20 °C:	1.16 g/cm³
- Relative density	Not determined.
- Vapour density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with	
· ·	NT-4 m2-21-1 1'CC' - 14 4 1
water:	Not miscible or difficult to mix.

- EU-EN

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Trade name: ergo 7388 - Component A ergo 7390

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

- Viscosity:

Dynamic at 25 °C: 2400 - 4500 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

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.

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.
- Ecotoxical effects:
- Remark: Toxic for fish
- Additional ecological information:
- General notes:

Also poisonous for fish and plankton in water bodies.

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Toxic for aquatic organisms

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.

- 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 inform	nation
- 14.1 UN-Number - ADR, IMDG, IATA	UN3082
- 14.2 UN proper shipping name - ADR	3082 ENVIRONMENTALLY HAZARDOU SUBSTANCE, LIQUID, N.O.S. (Bisphenol F epo
- IMDG	resin) ENVIRONMENTALLY HAZARDOUS SUBSTANC LIQUID, N.O.S. (Bisphenol F epoxy resin), MARIN POLLUTANT
·IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANC LIQUID, N.O.S. (Bisphenol F epoxy resin)
- 14.3 Transport hazard class(es)	
Chara	O (MC) Missellane and demonstrate and estimate
- Class - Label	9 (M6) Miscellaneous dangerous substances and articles
- IMDG, IATA	
- Class - Label	9 Miscellaneous dangerous substances and articles.9
- 14.4 Packing group - ADR, IMDG, IATA	III
- 14.5 Environmental hazards: - Marine pollutant: - Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)

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Trade name: ergo 7388 - Component A ergo 7390

	(Contd. of page
- Special marking (IATA):	Symbol (fish and tree)
- 14.6 Special precautions for user - Hazard identification number (Kemler code): - EMS Number: - Stowage Category	Warning: Miscellaneous dangerous substances an articles. 90 F-A,S-F A
- 14.7 Transport in bulk according to Annex II o Marpol and the IBC Code	f Not applicable.
- Transport/Additional information:	ADR: SV375 IMDG-Code: 2.10.2.7 IATA-DGR: A197 (375)
- ADR - Limited quantities (LQ) - Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
- Transport category - Tunnel restriction code - Remarks:	(-) SV375: These substances are not subject to the other provisions of ADR / RID if they are transported in individual of composite packaging with a net quantity of no more than 1 of liquid substances or a net mass of no more than 5 k of solids per individual or inner packaging, provided that the packaging is used correspond to the general provision of subsections 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- IMDG - Remarks:	2.10.2.7: Marine pollutants in individual packaging or composit packaging with a net quantity per individual or inner packaging of no more than 5 L for liquids or a net mas per individual or inner packaging of no more than 5 kg for solids are not subject to any other provisions of this Codapplicable to marine pollutants, provided that the packaging complies with the general Meet the requirements in 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. If the case of marine pollutants that also meet the criteria for inclusion in another class, all provisions of this Code that apply to any further hazards continue to apply.
- IATA - Remarks:	A 197 (375): These substances when transported in single of combination packagings containing a net quantity personal single or inner packaging of 5 L or less for liquids of having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions of 5.0.2.4.15.0.2.6.1.1 and 5.0.2.8.
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOU SUBSTANCE, LIQUID, N.O.S. (BISPHENOL EPOXY RESIN), 9, III

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Trade name: ergo 7388 - Component A ergo 7390

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SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Chemical safety assessment
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- -DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

- Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

- Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- 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.

- Abbreviations and acronyms:

ADR: Accord relatif au transport international 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 – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

- * Data compared to the previous version altered.





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

- 1.1 Product identifier
- Trade name: ergo 7389 Component B ergo 7390
- 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

Epoxy resin adhesive

- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Kisling AG

Motorenstrasse 102

CH-8620 Wetzikon

Tel: +41-58-272 0 272

- Only representative (REACH) and importer (CLP):

Kisling Deutschland GmbH

Salzstraße 15

D-74676 Niedernhall

Tel +49 8171 99982 30

- Further information obtainable from: Product safety department
- Department issuing MSDS: ergo@kisling.com
- 1.4 Emergency telephone number: +49-700-24 112 112 (KAR)

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.

- 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





GHS05

05 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.

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Trade name: ergo 7389 - Component B ergo 7390

(Contd. of page 1)

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 [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

- 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:		
EINECS: 220-666-8 Index number: 612-067-00-9	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	> 50 - ≤ 100%
1	trimethylhexane-1,6-diamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	> 30 - ≤ 50%

⁻ Additional information: For the wording of the listed hazard 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.

- 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.

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Trade name: ergo 7389 - Component B ergo 7390

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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:

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

Do not allow product to reach sewage system or any water course.

- 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.

-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
- Storage class (TRGS 510, Storage of hazardous substances in non-stationary containers): 8 B
- -7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

(Contd. on page 4)

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Trade name: ergo 7389 - Component B ergo 7390

	(Contd. of page 3)		
- Ingredients with limit	- Ingredients with limit values that require monitoring at the workplace:		
2855-13-2 3-aminomet	2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine		
MAK (Germany) als Da	MAK (Germany) als Dampf und Aerosol;vgl.Abschn.IIb		
- PNECs	- PNECs		
2855-13-2 3-aminomet	2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine		
PNEC Freshwater	0.06 mg/l		
PNEC Freshwater sed	5.784 mg/kg		
PNEC Marinewater	0.006 mg/l		
PNEC Soil	1.121 mg/kg		
PNEC STP	3.18 mg/l		
PNEC Marinewater sed	0.578 mg/kg		

- 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 trough 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:

Fluid Form: Colourless Colour: Amine-like - Odour: - Odour threshold: Not determined.

(Contd. on page 5)

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Trade name: ergo 7389 - Component B ergo 7390

		(Contd. of page 4)
- pH-value:	Not determined.	
- Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. Undetermined.	
- Flash point:	Not applicable.	
- Flammability (solid, gas):	Not applicable.	
- Decomposition temperature:	Not determined.	
- Auto-ignition temperature:	Product is not self-igniting.	
- Explosive properties:	Product does not present an explosion hazard.	
- Explosion limits: Lower: Upper: - Oxidising properties	Not determined. Not determined. Not determined.	
- Vapour pressure:	Not determined.	
- Density at 20 °C: - Relative density - Vapour density - Evaporation rate	0.87 g/cm³ Not determined. Not determined. 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: Kinematic:	5 - 10 mPas 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.

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:		
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Oral LD50 1,030 mg/kg (Rat, male/female)		

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

Oral LD50 910 mg/kg (Rat, male/female)

- 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

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Sensitisation | Sensibilisierung durch Hautkontakt | (Guinea pig) (OECD 406) | Ergebnis: Sensibilisierung durch Hautkontakt

- 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.

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

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

EC50/24 h 31.5 mg/l (DA)

- 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.
- Ecotoxical effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:

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

Harmful to aquatic organisms

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.

- 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	UN2735
- 14.2 UN proper shipping name - ADR	2735 AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINE
- IMDG, IATA	TRIMETHYLHEXAMETHYLENEDIAMINES) AMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONEDIAMINES) TRIMETHYLHEXAMETHYLENEDIAMINES)
- 14.3 Transport hazard class(es)	
- ADR	
- Class	8 (C7) Corrosive substances.
- Label	8
- IMDG, IATA	
- Class - Label	8 Corrosive substances.
- 14.4 Packing group - ADR, IMDG, IATA	II
- 14.5 Environmental hazards:	Not applicable.
- 14.6 Special precautions for user	Warning: Corrosive substances.
- Hazard identification number (Kemler code):- EMS Number:	80 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)	IL
- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging. 50 ml Maximum net quantity per outer packaging: 500 ml
- Transport category	2 E
- Tunnel restriction code	
- UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S (ISOPHORONEDIAMINES), 8, II

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SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Chemical safety assessment
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

- Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

- Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

- 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.

- Abbreviations and acronyms:

ADR: Accord relatif au transport international 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)

PNEC: Predicted No-Effect Concentration (REACH)

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 - Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

- * Data compared to the previous version altered.