03.11.2020	Kit Components
Product code	Description
7490-200917	ergo 7490
Components:	
7438-200624	ergo 7438 - Component A ergo 7440, ergo 7490
7489-200928	ergo 7489 - Component B ergo 7490





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

- 1.1 Product identifier

- Trade name: ergo 7438 - Component A ergo 7440, ergo 7490

- 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 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

- Further information obtainable from: ergo@kisling.com

- Department issuing MSDS: ergo@kisling.com

- 1.4 Emergency telephone number:

Tox Info Suisse: 145 / +41-44-2 51 51 51

+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.

Eye Irrit. 2 H319 Causes serious eye 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) Phenol polymer with formaldehyde, glycidyl ether

- Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

- Precautionary statements

P261 Avoid breathing vapours.

P280 Wear protective gloves / eye protection. P302+P352 IF ON SKIN: Wash with plenty of water.

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

present and easy to do. Continue rinsing.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

#### - Additional information:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

- Labelling of packages where the contents do not exceed 125 ml
- Hazard pictograms





#### - Signal word Warning

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

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (BPFDGE) Phenol polymer with formaldehyde, glycidyl ether

#### - Hazard statements

H317 May cause an allergic skin reaction.

#### - Precautionary statements

P261 Avoid breathing vapours.

Wear protective gloves / eye protection. P302+P352 IF ON SKIN: Wash with plenty of water.

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

#### - 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 NLP: 500-006-8 Index number: 603-074-00-8 Reg.nr.: 01-2119454392-40-xxxx	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (BPFDGE)  Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens.	> 50 - ≤ 100%
	CAS: 28064-14-4	Phenol polymer with formaldehyde, glycidyl ether Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	≥ 10 - ≤ 15%
Ī	CAS: 905297-77-4 EINECS: 292-011-4	1,2,3-propanetriol, glycidyl ether Skin Irrit. 2, H315; Eye Irrit. 2, H319	> 1 - ≤ 5%
	CAS: 2530-83-8 EINECS: 219-784-2 Reg.nr.: 01-2119513212-58-xxxx	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane Eye Dam. 1, H318	> 1 - < 3%

- 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.
- 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.

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#### - 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.

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

#### - 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: 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

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:

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:

Pick up mechanically.

Flush away residues with plenty of water.

Dispose contaminated material as waste according to item 13.

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".

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.

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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.
- Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 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**

- 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.

- DNELs			
2530-83-8	2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane		
Dermal	-		21 mg/kg bw (Worker)
	Longterm	System	21 mg/kg bw/day (Worker)
Inhalative	Acute, Sy	stem	147 mg/m³ (Worker)
	Longterm	System	147 mg/m³ (Worker)
- PNECs	- PNECs		
2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane			
PNEC Fre	shwater	1 mg/l	
PNEC Marinewater 0.1 mg/l		0.1 mg/l	

- 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.

#### - 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection: Safety glasses

- 9.1 Information on basic physical and chemical properties - General Information - Appearance:	SECTION 9: Physical and chemical properties		
Form: ADR 2.3.4; solid Colour: Light beige Characteristic Odour threshold: Not determined.  - PH-value: Not applicable.  - Change in condition Melting point/freezing point: Initial boiling point and boiling range: > 200 °C  - Flash point: Not applicable.  - Flammability (solid, gas): Not determined.  - 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. Upper: Not determined.  - Oxidising properties Not determined.  - Vapour pressure: Not applicable.  - Density at 20 °C: Relative density Not determined Vapour density Not applicable Solubility in / Miscibility with	- General Information		
ADR 2.3.4: solid  Colour: Odour: Characteristic Odour threshold: Not determined.  - pH-value: Not applicable.  - Change in condition Melting point/freezing point: Initial boiling point and boiling range: > 200 °C  - Flash point: Not applicable.  - Flammability (solid, gas): Not determined.  - 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 applicable.  - Density at 20 °C: Relative density Not applicable.  - Solubility in / Miscibility with			
Colour: -Odour threshold: -Odour threshold: Not determined.  -pH-value: Not applicable.  -Change in condition Melting point/freezing point: Initial boiling point and boiling range: > 200 °C  -Flash point: Not applicable.  -Flammability (solid, gas): Not determined.  -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 applicable.  - Density at 20 °C: Relative density Not applicable Solubility in / Miscibility with	Form:		
- Odour threshold: - Odour threshold: - Odour threshold: - PH-value: - Change in condition - Melting point/freezing point: - Initial boiling point and boiling range: - 200 °C  - Flash point: - Not applicable.  - Flammability (solid, gas): - Not determined 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 Vapour pressure: - Not applicable Density at 20 °C: - Relative density - Vapour density - Vapour density - Vapour density - Vapour in / Miscibility with			
- Odour threshold:  - pH-value: - Change in condition Melting point/freezing point: Initial boiling point and boiling range: > 200 °C  - Flash point: Not applicable.  - Flammability (solid, gas): Not determined.  - 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 applicable.  - Density at 20 °C: Relative density Not determined. Not applicable.  - Solubility in / Miscibility with			
- pH-value:  Change in condition Melting point/freezing point: Initial boiling point and boiling range: > 200 °C  Flash point: Not applicable.  Flammability (solid, gas): Not determined.  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.  - Oxidising properties Not applicable.  - Density at 20 °C: Relative density Not applicable.  - Solubility in / Miscibility with			
- Change in condition Melting point/freezing point: Undetermined. Initial boiling point and boiling range: > 200 °C  - Flash point: Not applicable.  - Flammability (solid, gas): Not determined.  - 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 applicable.  - Density at 20 °C: Relative density Not determined. Not applicable Vapour density Not applicable Solubility in / Miscibility with	- Odour threshold:	Not determined.	
Melting point/freezing point:       Undetermined.         Initial boiling point and boiling range: > 200 °C         -Flash point:       Not applicable.         -Flammability (solid, gas):       Not determined.         - 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:       Not determined.         - Oxidising properties       Not determined.         - Vapour pressure:       Not applicable.         - Density at 20 °C:       1.35 g/cm³         - Relative density       Not determined.         - Vapour density       Not applicable.         - Evaporation rate       Not applicable.         - Solubility in / Miscibility with	- pH-value:	Not applicable.	
Initial boiling point and boiling range: > 200 °C  - Flash point: Not applicable.  - Flammability (solid, gas): Not determined.  - 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 applicable.  - Density at 20 °C: 1.35 g/cm³  - Relative density Not determined.  - Vapour density Not applicable.  - Evaporation rate Not applicable.  - Solubility in / Miscibility with			
- Flash point:  - Flammability (solid, gas):  - Decomposition temperature:  - Auto-ignition temperature:  - Explosive properties:  - Explosion limits:  - Lower:  - Upper:  - Oxidising properties  - Vapour pressure:  - Density at 20 °C:  - Relative density  - Vapour density  - Vapour density  - Evaporation rate  - Solubility in / Miscibility with  Not determined.  Not applicable.  Not applicable.  - Solubility in / Miscibility with			
- Flammability (solid, gas):  - Decomposition temperature:  - Auto-ignition temperature:  - Explosive properties:  - Explosion limits:  - Lower:  - Upper:  - Oxidising properties  - Vapour pressure:  - Density at 20 °C:  - Relative density  - Vapour density  - Vapour density  - Vapour density  - Solubility in / Miscibility with  Not determined.  Not determined.  Not applicable.  Not applicable.  - Solubility in / Miscibility with	Initial boiling point and boiling range	e: > 200 °C	
- Decomposition temperature:  - Auto-ignition temperature:  - Explosive properties:  - Explosion limits:  - Lower:  - Upper:  - Oxidising properties  - Vapour pressure:  - Density at 20 °C:  - Relative density  - Vapour density  - Evaporation rate  - Solubility in / Miscibility with  Not determined.  Not determined.  Not applicable.  Not applicable.  Not applicable.	- Flash point:	Not applicable.	
- Auto-ignition temperature:  - Explosive properties:  - Explosion limits:  - Lower:  - Upper:  - Oxidising properties  - Vapour pressure:  - Density at 20 °C:  - Relative density  - Vapour density  - Vapour density  - Explosion hazard.  Product does not present an explosion hazard.  Not determined.  Not determined.  Not applicable.  - 1.35 g/cm³  Not determined.  Not applicable.  Not applicable.  - Not applicable.  - Solubility in / Miscibility with	- Flammability (solid, gas):	Not determined.	
- Explosive properties:  - Explosion limits:  Lower:  Not determined.  Upper:  Not determined.  - Oxidising properties  Not applicable.  - Vapour pressure:  Not applicable.  - Density at 20 °C:  - Relative density  Not applicable.  - Vapour density  Not applicable.  - Solubility in / Miscibility with	- Decomposition temperature:	Not determined.	
- Explosion limits: Lower: Not determined. Upper: Not determined.  - Oxidising properties Not applicable.  - Density at 20 °C: Relative density Not determined.  - Vapour density Not applicable.  - Evaporation rate Not applicable.  - Solubility in / Miscibility with	- Auto-ignition temperature:	Product is not self-igniting.	
Lower: Upper: Not determined. Oxidising properties Not determined.  - Vapour pressure: Not applicable.  - Density at 20 °C: Relative density Not determined Vapour density Not applicable.  - Evaporation rate Not applicable.  - Solubility in / Miscibility with	- Explosive properties:	Product does not present an explosion hazard.	
Upper: Not determined Oxidising properties Not determined.  - Vapour pressure: Not applicable.  - Density at 20 °C: 1.35 g/cm³ - Relative density Not determined Vapour density Not applicable Evaporation rate Not applicable.  - Solubility in / Miscibility with	- Explosion limits:		
- Oxidising properties  Not determined.  - Vapour pressure:  Not applicable.  - Density at 20 °C:  - Relative density  Not determined.  - Vapour density  Not applicable.  - Evaporation rate  Not applicable.  - Solubility in / Miscibility with			
- Vapour pressure:  - Density at 20 °C:  - Relative density  - Vapour density  - Vapour density  - Evaporation rate  - Solubility in / Miscibility with	Upper:	Not determined.	
- Density at 20 °C: - Relative density - Vapour density - Evaporation rate - Solubility in / Miscibility with	- Oxidising properties	Not determined.	
- Relative density - Vapour density - Evaporation rate  - Solubility in / Miscibility with  Not determined. Not applicable.  Not applicable.	- Vapour pressure:	Not applicable.	
- Vapour density - Evaporation rate  Not applicable. Not applicable.  - Solubility in / Miscibility with	- Density at 20 °C:	1.35 g/cm <sup>3</sup>	
- Evaporation rate Not applicable Solubility in / Miscibility with	- Relative density	Not determined.	
- Solubility in / Miscibility with	- Vapour density	Not applicable.	
	- Evaporation rate	Not applicable.	
water: Insoluble.	- Solubility in / Miscibility with		
	water:	Insoluble.	
- Partition coefficient: n-octanol/water: Not determined.	- Partition coefficient: n-octanol/water:	Not determined.	
- Viscosity:	- Viscosity:		
<b>Dynamic:</b> Not applicable.		Not applicable.	
Kinematic: Not applicable.	Kinematic:	Not applicable.	
- <b>9.2 Other information</b> No further relevant information available.	- 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 strong alkali.

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Reacts with strong 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 Based on available data, the classification criteria are not met.

	- LD/LC50 values relevant for classification:		
	2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane		
Γ	Oral	LD50	8,025 mg/kg (Rat, male/female) (OECD TG 401)
İ	Dermal	LD50	4,250 mg/kg (Rabbit) (OECD TG 402)

- Primary irritant effect:
- Skin corrosion/irritation

Causes skin irritation.

- Serious eye damage/irritation

Causes serious eye irritation.

- 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.

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.

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#### **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
SECTION	17. II alisbuit	muui mauun

- 14.1 UN-Number - ADR, IMDG, IATA	UN3077
- 14.2 UN proper shipping name	
- ADR	3077 ENVIRONMENTALLY HAZARDOUS
	SUBSTANCE, SOLID, N.O.S. (Bisphenol F epoxy resin,
	Phenol polymer with formaldehyde, glycidyl ether)
- IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	SOLID, N.O.S. (Bisphenol F epoxy resin, Phenol polymer
	with formaldehyde, glycidyl ether), MARINE
	POLLUTANT
- IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	SOLID, N.O.S. (Bisphenol F epoxy resin, Phenol polymer
	with formaldehyde, glycidyl ether)
- 14.3 Transport hazard class(es)	
14.5 Transport nazaru class(cs)	
- ADR	



- Class
 - Label
 9 (M7) Miscellaneous dangerous substances and articles.
 9

- IMDG, IATA



- Class 9 Miscellaneous dangerous substances and articles. - Label - 14.4 Packing group Ш - ADR, IMDG, IATA - 14.5 Environmental hazards: Product contains environmentally hazardous substances: Bisphenol F epoxy resin - 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. - Hazard identification number (Kemler code): 90 - EMS Number: F-A,S-F - Stowage Category A

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	(Contd. of page 7)
- Stowage Code	SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
- 14.7 Transport in bulk according to Anne Marpol and the IBC Code	x II of Not applicable.
- Transport/Additional information:	ADR: SV375 IMDG-Code: 2.10.2.7 IATA-DGR: A197 (375)
- ADR - Limited quantities (LQ) - Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g 3
- 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 or composite packaging with a net quantity of no more than 5 l of liquid substances or a net mass of no more than 5 kg of solids per individual or inner packaging, provided that the packaging is used correspond to the general provisions of subsections 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
<ul> <li>- IMDG</li> <li>- Limited quantities (LQ)</li> <li>- Excepted quantities (EQ)</li> </ul>	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g
- Remarks:	Maximum net quantity per outer packaging: 1000 g 2.10.2.7:  Marine pollutants in individual packaging or composite packaging with a net quantity per individual or inner packaging of no more than 5 L for liquids or a net mass per individual or inner packaging of no more than 5 kg for solids are not subject to any other provisions of this Code applicable 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. In 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 or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or 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 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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- UN "Model Regulation":

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (BISPHENOL F EPOXY RESIN, PHENOL POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER), 9, III

#### **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- 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.

- 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.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

#### - 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)

DNEL: Derived No-Effect Level (REACH)

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

Skin Irrit. 2: Skin corrosion/irritation — Category 2

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

Eye Irrit. 2: Serious eye damage/eye 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 7489 Component B ergo 7490
- 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 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

- Further information obtainable from: ergo@kisling.com
- Department issuing MSDS: ergo@kisling.com
- 1.4 Emergency telephone number:

Tox Info Suisse: 145 / +41-44-2 51 51 51

+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 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 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

GHS07

- Signal word Danger

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

O,O'-Bis(2-aminopropyl)polypropylene glycol

Butadiene-acrylonitrile copolymer

1,3-Cyclohexanedimethanamine

Fatty acids, C18 unsaturated dimers, polymers with tall oil fatty acids and triethylenetetramine

#### - Hazard statements

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 / eye protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

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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.

P310 Immediately call a POISON CENTER/doctor.

#### - Labelling of packages where the contents do not exceed 125 ml

#### - Hazard pictograms





#### - Signal word Danger

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

O,O'-Bis(2-aminopropyl)polypropylene glycol

Butadiene-acrylonitrile copolymer

1,3-Cyclohexanedimethanamine

Fatty acids, C18 unsaturated dimers, polymers with tall oil fatty acids and triethylenetetramine

#### - Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

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P260 Do not breathe vapours.

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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.

P310 Immediately call a POISON CENTER/doctor.

#### - 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: 9046-10-0	O,O'-Bis(2-aminopropyl)polypropylene glycol	> 30 - ≤ 50%
	Skin Corr. 1B, H314; Aquatic Chronic 3, H412	
CAS: 68683-29-4	Butadiene-acrylonitrile copolymer	> 15 - ≤ 30%
	Skin Irrit. 2, H315; Skin Sens. 1, H317	
CAS: 68082-29-1	Fatty acids, C18 unsaturated dimers, polymers with tall oil	> 15 - ≤ 30%
NLP: 500-191-5	fatty acids and triethylenetetramine	
	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 2579-20-6	1,3-Cyclohexanedimethanamine	> 5 - ≤ 15%
EINECS: 219-941-5	Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4,	
Reg.nr.: 01-2119543741-41-xxxx	H302; Acute Tox. 4, H312; Aquatic Chronic 3, H412	

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

#### - 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.

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

#### - 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.

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.

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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: Store away from foodstuffs.
- Further information about storage conditions:

Store under lock and key and out of the reach of children.

Keep receptacle tightly sealed.

- Storage class (TRGS 510, Storage of hazardous substances in non-stationary containers): 8 A
- -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.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

#### - Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter ABEK

#### - 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

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SECTION 9: Physical and chemi	cal properties
- 9.1 Information on basic physical and c	hemical properties
- General Information	
- Appearance:	
Form:	Pasty ADR 2.3.4: solid
Colour:	ADR 2.3.4: solid Black
- Odour:	Amine-like
- Odour threshold:	Not determined.
- pH-value:	Not determined.
-	Not determined.
- Change in condition	XX 1
Melting point/freezing point: Initial boiling point and boiling range	Undetermined.
initial boning point and boning range	
- Flash point:	> 100 °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:	1.07 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:	Not determined.
<b>y</b>	

Not determined.

No further relevant information available.

#### **SECTION 10: Stability and reactivity**

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability

- 9.2 Other information

**Kinematic:** 

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

- LD/LC	- LD/LC50 values relevant for classification:	
2579-20	2579-20-6 1,3-Cyclohexanedimethanamine	
Oral	LD50	700 mg/kg (Rat, male/female)
Dermal	LD50	1,700 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

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.
- 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.

- 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

UN3259

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<ul><li>- 14.2 UN proper shipping name</li><li>- ADR</li><li>- IMDG, IATA</li></ul>	3259 AMINES, SOLID, CORROSIVE, N.O.S. (1,3 C y c l o h e x a n e d i m e t h a n a m i n e TRIETHYLENETETRAMINE)  AMINES, SOLID, CORROSIVE, N.O.S. (1,3 C y c l o h e x a n e d i m e t h a n a m i n e TRIETHYLENETETRAMINE)
- 14.3 Transport hazard class(es)	
- ADR	
- Class	8 (C8) Corrosive substances.
- Label - IMDG, IATA	8 
- Class - Label	8 Corrosive substances.
- 14.4 Packing group - ADR, IMDG, IATA	П
- 14.5 Environmental hazards:	Product contains environmentally hazardous substances Fatty acids, C18 unsaturated dimers, polymers with tall of fatty acids and triethylenetetramine
- 14.6 Special precautions for user	Warning: Corrosive substances.
<ul><li>- Hazard identification number (Kemler code):</li><li>- EMS Number:</li></ul>	80 F-A,S-B
- Segregation groups	Alkalis
- Stowage Category	A
- Segregation Code	SG35 Stow "separated from" SGG1-acids
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	f Not applicable.
- Transport/Additional information:	
<ul> <li>- ADR</li> <li>- Limited quantities (LQ)</li> <li>- Excepted quantities (EQ)</li> </ul>	1 kg Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<ul><li>- Transport category</li><li>- Tunnel restriction code</li></ul>	2 E
- IMDG - Limited quantities (LQ)	1 kg
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- Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- UN "Model Regulation":	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. $(1,3-C\ Y\ C\ L\ O\ H\ E\ X\ A\ N\ E\ D\ I\ M\ E\ T\ H\ A\ N\ A\ M\ I\ N\ E\ ,$ TRIETHYLENETETRAMINE), 8, II

#### **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- 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.

- 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.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

#### - 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 - oral - Category 4

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Corr. 1B: Skin corrosion/irritation - Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

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