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

1.1. Product identifier

Mixture identification:

Trade name: KERAPOXY comp.A
Trade code: 90459990
UFI: 68Y7-M0CT-S001-R891

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

Recommended use: Acid-resistant epoxy grout and adhesive for ceramic tiles
Uses advised against: Data not available.

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road
Halesowen - West Midlands B62 8HD
phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)
Responsable: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1A	May cause an allergic skin reaction.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word

Warning

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/clothing and eye/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Special Provisions:

EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Contains

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

bis-[4-(2,3-epoxipropoxi)phenyl]propane

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

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards: No other hazards

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: KERAPOXY comp.A

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥50 - <75 %	silica sand	CAS:14808-60-7 EC:238-878-4	Substance with a Union workplace exposure limit.	
≥10 - <20 %	bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS:1675-54-3, 25085-99-8 EC:216-823-5 Index:603-073-00-2	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411 Specific Concentration Limits: C ≥ 5%: Skin Irrit. 2 H315 C ≥ 5%: Eye Irrit. 2 H319	01-2119456619-26-XXXX
≥1 - <2.5 %	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS:9003-36-5 EC:701-263-0	Skin Irrit. 2, H315; Aquatic Chronic 2, H411; Skin Sens. 1, H317	01-2119454392-40-XXXX
≥0.49 - <1 %	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS:1065336-91-5 EC:915-687-0	Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Repr. 2, H361f	01-2119491304-40-XXXX
≥0.49 - <1 %	free crystalline silica (Ø <10 µ)	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
≥0.49 - <1 %	Phenol, styrenated	CAS:61788-44-1 EC:262-975-0	Aquatic Chronic 2, H411; Aquatic Acute 1, H400	01-2119979575-18-xxxx
≥0.1 - <0.25 %	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Repr. 1B, H360F	01-2119485289-22-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
silica sand CAS: 14808-60-7	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	National	AUSTRALIA	Long Term: 0.05 mg/m3
	National	BELGIUM	Long Term: 0.1 mg/m3
	National	BULGARIA	Long Term: 0.07 mg/m3
	National	CROATIA	Long Term: 0.1 mg/m3
	National	CZECH REPUBLIC	Long Term: 0.1 mg/m3
	National	DENMARK	Long Term: 0.3 mg/m3 DENMARK, inhalable aerosol inhalable aerosol
	National	DENMARK	Long Term: 0.1 mg/m3 DENMARK, respirable aerosol respirable aerosol
	National	DENMARK	Long Term: 0.3 mg/m3
	National	DENMARK	Long Term: 0.1 mg/m3
	National	ESTONIA	Long Term: 0.1 mg/m3
	National	FINLAND	Long Term: 0.05 mg/m3
	National	FRANCE	Long Term: 0.1 mg/m3
	SUVA	GERMANY	Long Term: 0.15 mg/m3 50 µg/m³ (Partikel Durchmesser < 12 µm) - TRGS 906
	National	HUNGARY	Long Term: 0.15 mg/m3
	National	LITHUANIA	Long Term: 0.1 mg/m3
	Malaysia OEL	MALAYSIA	Long Term: 0.1 mg/m3 0.1 mg/m3 TWA (respirable dust)
	NDS	NETHERLANDS	Long Term: 0.075 mg/m3
	National	NORWAY	Long Term: 0.3 mg/m3 Totalstøv (total dust); K: Kjemikalier som skal betraktes som kreftfremkallende. (K: Chemicals to be treated as carcinogenic.)
	ACGIH		Long Term: 0.025 mg/m3 (R), A2 - Pulm fibrosis, lung cancer
	NDS	POLAND	Long Term: 0.1 mg/m3
	National	PORTUGAL	Long Term: 0.025 mg/m3
	National	ROMANIA	Long Term: 0.1 mg/m3

	National	SLOVAKIA	Long Term: 0.1 mg/m3; Short Term: 0.5 mg/m3
	National	SLOVENIA	Long Term: 0.1 mg/m3
	National	SPAIN	Long Term: 0.05 mg/m3
	National	SWEDEN	Long Term: 0.1 mg/m3
	National	SWITZERLAND	Long Term: 0.15 mg/m3 A
	EU		Long Term: 0.1 mg/m3 Behaviour Binding
free crystalline silica (Ø <10 µ) CAS: 14808-60-7	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	National	ARGENTINA	Long Term: 0.05 mg/m3
	National	AUSTRALIA	Long Term: 0.1 mg/m3
	National	AUSTRIA	Long Term: 0.15 mg/m3 A*
	National	BELGIUM	Long Term: 0.1 mg/m3
	National	BULGARIA	Long Term: 0.07 mg/m3
	National	CROATIA	Long Term: 0.1 mg/m3
	National	CZECH REPUBLIC	Long Term: 0.1 mg/m3
	National	DENMARK	Long Term: 0.1 mg/m3; Short Term: 0.2 mg/m3 Respirabel fraktion, respirable fraction E: Stoffet har en EU-grænseværdi. K: Stoffet anses for at kunne være kræftfremkaldende.
	National	DENMARK	Long Term: 0.3 mg/m3; Short Term: 0.6 mg/m3 Total dust
	National	ESTONIA	Long Term: 0.1 mg/m3
	National	FINLAND	Long Term: 0.05 mg/m3 Respirabel fraktion. Respirable fraction
	National	FRANCE	Long Term: 0.1 mg/m3
	National	HUNGARY	Long Term: 0.15 mg/m3
	National	ITALY	Long Term: 0.1 mg/m3
	National	LITHUANIA	Long Term: 0.1 mg/m3
	Malaysia OEL	MALAYSIA	Long Term: 0.1 mg/m3 0.1 mg/m3 TWA (respirable dust)
	NDS	NETHERLANDS	Long Term: 0.075 mg/m3
	National	NORWAY	Long Term: 0.3 mg/m3 Totalstøv (total dust); K: Kjemikalier som skal betraktes som kreftfremkallende.
	National	NORWAY	Long Term: 0.05 mg/m3 Respirabelt støv (respirable dust); K: Kjemikalier som skal betraktes som kreftfremkallende. G: EU har fastsatt en bindende grenseverdi og/eller anmerkning av stoffet.
	ACGIH		Long Term: 0.025 mg/m3 (R), A2 - Pulm fibrosis, lung cancer
	EU		Long Term: 0.025 mg/m3 A2 (R) - Pulm fibrosis, lung cancer
	NDS	POLAND	Long Term: 0.1 mg/m3
	National	PORTUGAL	Long Term: 0.025 mg/m3
	National	ROMANIA	Long Term: 0.1 mg/m3
	National	SLOVAKIA	Long Term: 0.1 mg/m3; Short Term: 0.5 mg/m3
	National	SLOVENIA	Long Term: 0.1 mg/m3
	National	SPAIN	Long Term: 0.05 mg/m3
	National	SWEDEN	Long Term: 0.1 mg/m3 Respirabel fraktion. Respirable fraction

C: Ämnet är cancerframkallande.
M: Medicinska kontroller.

Predicted No Effect Concentration (PNEC) values

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l
	Exposure Route: Fresh Water; PNEC Limit: 0.003 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 0.294 mg/kg
	Exposure Route: Marine water; PNEC Limit: 0.0003 mg/l
	Exposure Route: Marine water sediments; PNEC Limit: 0.0294 mg/kg
	Exposure Route: Soil; PNEC Limit: 0.237 mg/kg
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5	Exposure Route: Fresh Water; PNEC Limit: 0.0022 mg/l
	Exposure Route: Marine water; PNEC Limit: 0.00022 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 1.05 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 0.11 mg/kg
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l
	Exposure Route: Soil; PNEC Limit: 0.21 mg/kg
	Exposure Route: Intermittent release; PNEC Limit: 0.009 mg/l
Phenol, styrenated CAS: 61788-44-1	Exposure Route: Fresh Water; PNEC Limit: 0.001 mg/l
	Exposure Route: Marine water sediments; PNEC Limit: 65778 mg/kg
	Exposure Route: Freshwater sediments; PNEC Limit: 65778 mg/kg
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 0.17 mg/l
	Exposure Route: Soil; PNEC Limit: 31525 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2	Exposure Route: Marine water; PNEC Limit: 0.00072 mg/l
	Exposure Route: Fresh Water; PNEC Limit: 0.0072 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 66.77 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 6.677 mg/kg
	Exposure Route: Soil; PNEC Limit: 80.12 mg/kg
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l

Derived No Effect Level (DNEL) values

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5	Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects Consumer: 0.18 mg/kg
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 1.27 mg/m3; Consumer: 0.31 mg/m3
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 1.8 mg/kg; Consumer: 0.9 mg/kg
Phenol, styrenated CAS: 61788-44-1	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 11.02 mg/m3; Consumer: 2.717 mg/m3
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 6.25 mg/kg; Consumer: 3.125 mg/kg
	Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects Consumer: 1.562 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: paste

Colour: various

Odour: Characteristic

Odour threshold: Not available

Melting point/freezing point: Not available

Boiling point or initial boiling point and boiling range: Not available

Flammability: N.A.

Lower and upper explosion limit: Lower and upper explosion limit: Not available

Flash point: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: Not Relevant

Viscosity: 2,000,000.00 cPs

Kinematic viscosity: Not available

Solubility in water: Insoluble

Solubility in oil: soluble

Partition coefficient n-octanol/water (log value): Not available

Vapour pressure: 0.01

Density and/or relative density: 1.65 g/cm3

Relative vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

Explosive properties: ==

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1A(H317)
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

silica sand	a) acute toxicity	LD50 Oral > 2000 mg/kg
		LD50 Skin > 2000 mg/kg
bis-[4-(2,3-epoxipropoxi)phenyl] propane	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	a) acute toxicity	LD50 Oral Rat = 3230 mg/kg
		LD50 Skin Rat > 3170 mg/kg
free crystalline silica (Ø <10 µ)	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
Phenol, styrenated	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg
		LD50 Skin Rat > 2000 mg/kg

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	a) acute toxicity	LD50 Oral Rat = 19200 mg/kg
		LD50 Skin Rabbit = 4000 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

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

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
bis-[4-(2,3-epoxipropoxi)phenyl]propane	CAS: 1675-54-3, 25085-99-8 - EINECS: 216-823-5 - INDEX: 603-073-00-2	a) Aquatic acute toxicity : LC50 Fish = 2 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia = 1.8 mg/L 48h
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS: 9003-36-5 - EINECS: 701-263-0	a) Aquatic acute toxicity : LC50 Fish = 5.7 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae = 1.8 mg/L 72h
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 1065336-91-5 - EINECS: 915-687-0	a) Aquatic acute toxicity : LC50 Fish = 0.9 mg/L 96h
		a) Aquatic acute toxicity : EC50 Algae = 1.68 mg/L 72h
		b) Aquatic chronic toxicity : NOEC Daphnia = 1 mg/L 21d
Phenol, styrenated	CAS: 61788-44-1 - EINECS: 262-975-0	a) Aquatic acute toxicity : EC50 Daphnia = 4.6 mg/L 48 ECHA
		a) Aquatic acute toxicity : LC50 Fish = 5.6 mg/L 96h ECHA
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h
		a) Aquatic acute toxicity : EL50 Daphnia = 7.2 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae = 843 mg/L 72h
		b) Aquatic chronic toxicity : NOEC Algae = 500 mg/L 72h

12.2. Persistence and degradability

Component	Persitence/Degradability:
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Non-readily biodegradable
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Readily biodegradable

12.3. Bioaccumulative potential

Component	Bioaccumulation

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Not bioaccumulative

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID):

ADR-Hazard identification number: NA

Not Applicable

Air (IATA):

Not Applicable

Sea (IMDG):

Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EU) n. 2020/878
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 75

SVHC Substances:

SVHC substances not present in a concentration ≥ 0.1% (w/w)

National regulations

Produktregisteret Norge: 52927
Produktregister Danmark: 4110777
MAL-kode: 00-5 (1993) A+B: 00-5 (1993)
Lagerklasse (TRGS-510): 12 - Non-combustible liquids, that cannot be assigned to any of the aforementioned LGK

German Water Hazard Class.

2

Regulation (UE) 2019/1148 (Explosive precursors): No substances contained

Regulation (CE) 273/2004 and 111/2005 (Drug percursors): No substances contained

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360F	May damage fertility.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.2/2	Skin Irrit. 2	Skin irritation, Category 2

3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.7/1B	Repr. 1B	Reproductive toxicity, Category 1B
3.7/2	Repr. 2	Reproductive toxicity, Category 2
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1A, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information
- SECTION 16: Other information