

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

1.1. Product identifier

Mixture identification: Trade name: KERAPOXY CQ comp. A Trade code: 90639990 UFI: QA80-10G1-C00S-U6JG

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 SK sro Nádražná 39, Ivanka pri Dunaji, Slovakia Tel: +421-2-4020 4511 - Fax: +421-2-2091-0846 Responsible: office@mapei.sk - sicurezza@mapei.it

1.4. Emergency telephone number

Tel: +421 2 5477 4166

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Skin Irrit. 2Causes skin irritation.Eye Irrit. 2Causes serious eye irritation.Skin Sens. 1AMay cause an allergic skin reaction.Aquatic Chronic 3Harmful to aquatic life with long lasting effects.Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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

Pictograms and Signal Words



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:

P261Avoid breathing mist/vapours/spray.P264Wash hands thoroughly after handling.P273Avoid release to the environment.P280Wear protective gloves/clothing and eye/face protection.P333+P313If skin irritation or rash occurs: Get medical advice/attention.P337+P313If eye irritation persists: Get medical advice/attention.

Special Provisions:

Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700). May produce an allergic reaction.

EUH208

Container	
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH208	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. May produce an allergic reaction.
EUH208	Contains oxirane, mono[(C12-14-alkyloxy)methyl] derivs May produce an allergic reaction.

Contains:

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

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 CQ comp. A

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

Concentra tion (% w/w)	Name	Ident. Numb.	Classification	Registration Number
-	reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight	25068-38-6, 25085-99-8	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	01-2119456619-26
	<= 700)	EC:216-823-5 Index:603-073- 00-2	Specific Concentration Limits: $C \ge 5\%$: Skin Irrit. 2 H315 $C \ge 5\%$: Eye Irrit. 2 H319	
≥2.5 - <5 %	Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol	CAS:9003-36-5 EC:500-006-8	Skin Irrit. 2, H315; Skin Sens. 1A, H317; Aquatic Chronic 2, H411	01-2119454392-40-XXXX
≥2.5 - <5 %	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	01-2119485289-22-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		Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Repr. 2, H361f	01-2119491304-40-XXXX
≥0.05 - <0.1 %	free crystalline silica (Ø <10 $\mu)$	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
≥0.01 - <0.016 %	zinc pyrithione	CAS:13463-41-7 EC:236-671-3 Index:613-333- 00-7	Acute Tox. 2, H330 Acute Tox. 3, H301 STOT RE 1, H372 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Repr. 1B, H360, M-Chronic:10, M- Acute:1000	
			Acute Toxicity Estimate: ATE - Oral: 221mg/kg bw	

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

Ervthema

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 (CO2).

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.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

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.

6.3. Methods and material for containment and cleaning up

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

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.

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

List of components with OEL value

	OEL Type	Country	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Note
free crystalline silica (Ø <10 μ) CAS: 14808-60-7	National	SWEDEN	0.100		-		SWEDEN, respirable aerosol
	National	NORWAY	0.100				K: Chemicals to be treated as carcinogenic.
	NDS	POLAND	2.000				frakcja wdychalna
	NDS	POLAND	0.300				frakcja respirabilna
	National	DENMARK	0.3		0.600		DENMARK, inhalable aerosol inhalable aerosol
	National	DENMARK	0.100		0.200		DENMARK, respirable aerosol respirable aerosol
	ACGIH		0.025				(R), A2 - Pulm fibrosis, lung cancer
	EU		0.025				A2 (R) - Pulm fibrosis, lung cancer
	National	AUSTRIA	0.150				A*
	ACGIH		0.025				A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	National	SWEDEN	0.1				
	National	FRANCE	0.1				
	National	SPAIN	0.05				
	National	DENMARK	0.3				
	National	FINLAND	0.05				
	National	PORTUGAL	0.025				
	National	NORWAY	0.3		0.9		
	National	BELGIUM	0.1				
	NDS	POLAND	0.1				
	NDS	NETHERLANDS	0.075				
	National	CZECH REPUBLIC	0.1				
	National	HUNGARY	0.15				
	Malaysi a OEL	MALAYSIA	0.1				0.1 mg/m3 TWA (respirable dust)
	National	ESTONIA	0.1				
		SLOVAKIA	0.1		0.5		
		SLOVENIA	0.1				
		BULGARIA	0.07				
		ROMANIA	0.1				

Print date

National LITHUANIA	0.1
National CROATIA	0.1
National ITALY	0.100

Predicted No Effect Concentration (PNEC) values

Predicted No Effect Con	Predicted No Effect Concentration (PNEC) values					
	PNEC Limit	Ехро	sure Ro	ute	Exposure Fi	requency Remark
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxypropane and phenol CAS: 9003-36-5	10 mg/l		organisn ge treatr			
	0.003 mg/l	Fresh	Water			
	0.294 mg/kg	Fresh sedim	water ients			
	0.0003 mg/l	Marin	e water			
	0.0294 mg/kg	Marin sedim	e water ients			
	0.237 mg/kg	Soil				
oxirane, mono[(C12-14- alkyloxy)methyl] derivs. CAS: 68609-97-2	0.00072 mg/l	Marin	e water			
	0.0072 mg/l	Fresh	Water			
	66.77 mg/kg	Fresh sedim				
	6.677 mg/kg	Marin sedim	e water ients			
	80.12 mg/kg	Soil				
	10 mg/l		organisn ge treatr			
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	0.0022 mg/l	Fresh	Water			
	0.00022 mg/l	Marin	e water			
	1.05 mg/kg	Fresh sedim				
	0.11 mg/kg	Marin sedim				
	1 mg/l		organisn ge treatr			
	0.21 mg/kg	Soil				
	0.009 mg/l	Interr	nittent r	elease		
Derived No Effect Level	. (DNEL)					
	Worker Wo Industr Pro	ofess		Expos	ure Route	Exposure Frequency Remark
Reaction mass of Bis(1,2,2,6,6- pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-	,	-	0.18 mg/kg	Human	ı Oral	Long Term, systemic effects

1.27	0.31	Human Inhalation	Long Term, systemic
mg/m3	mg/m3		effects
1.8	0.9	Human Dermal	Long Term, systemic
mg/kg	mg/kg		effects

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 Color: various Odour: Characteristic Odour threshold: Not available Melting point / freezing point: Not available Initial boiling point and boiling range: Not available Flammability: N.A. Upper/lower flammability or explosive limits: Not available Flash point: Not available Auto-ignition temperature: Not available Decomposition temperature: Not available pH: Not available Viscosity: Not available Kinematic viscosity: Not available Solubility in water: Insoluble Solubility in oil: soluble Partition coefficient (n-octanol/water): Not available Vapour pressure: Not available Relative density: 1.85 g/cm3 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.

Print date

SECTION 11: Toxicological information

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

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Toxicological information of the mixture:
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 a) acute toxicity 	,	Not classified
		Based on available data, the classification criteria are not met
b) skin corrosio	n/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye d	amage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory of	r skin sensitisation	The product is classified: Skin Sens. 1A(H317)
e) germ cell mu	tagenicity	Not classified
		Based on available data, the classification criteria are not met
f) carcinogenicit	У	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-repeate	d exposure	Not classified
		Based on available data, the classification criteria are not met
j) aspiration haz	zard	Not classified
		Based on available data, the classification criteria are not met
Toxicological informat	ion on main com	ponents of the mixture:
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg
		LD50 Oral Rat = 11300 µL/kg
		LD50 Skin Rabbit = 20000 mg/kg
Formaldehyde, oligomeri reaction products with 1- chloro-2,3-epoxypropane and phenol		LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	a) acute toxicity	LD50 Oral Rat = 19200 mg/kg
		LD50 Skin Rabbit = 4000 mg/kg
Reaction mass of Bis(1,2,2,6,6-	a) acute toxicity	LD50 Oral Rat = 3230 mg/kg
e 27/07/202	2 Production N	lame KERAPOXY CQ comp. A Page

pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4 piperidyl sebacate		
		LD50 Skin Rat > 3170 mg/kg
free crystalline silica (Ø <10 μ)	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
zinc pyrithione	a) acute toxicity	ATE - Oral : 221 mg/kg bw LD50 Skin Rabbit = 100 mg/kg LD50 Oral Rat = 177 mg/kg LC50 Inhalation Rat 0.05 mg/l 4h LD50 Skin Rabbit = 100 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 components with eco-toxicological properties

Ecotox Infos Component Ident. Numb. Formaldehyde, oligomeric reaction CAS: 9003-36-5 a) Aquatic acute toxicity : LC50 Fish = 5.7 mg/L 96h products with 1-chloro-2,3-- EINECS: 500epoxypropane and phenol 006-8 a) Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 1.8 mg/L 72h oxirane, mono[(C12-14-CAS: 68609-97- a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h alkyloxy)methyl] derivs. 2 - EINECS: 271-846-8 -**INDEX: 603-**103-00-4 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 Reaction mass of Bis(1,2,2,6,6a) Aquatic acute toxicity : LC50 Fish = 0.9 mg/L 96h CAS: 1065336pentamethyl-4-piperidyl) sebacate 91-5 - EINECS: and Methyl 1,2,2,6,6-pentamethyl- 915-687-0 4-piperidyl sebacate a) Aquatic acute toxicity : EC50 Algae = 1.68 mg/L 72h b) Aquatic chronic toxicity : NOEC Daphnia = 1 mg/L 21d CAS: 13463-41- G: LD50 Avian Colinus virginianus = 64 mg/kg NZ_CCID zinc pyrithione 7 - EINECS: 236-671-3 -INDEX: 613-

12.2. Persistence and degradability

Component	
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Persitence/Degradability:

333-00-7

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

Reaction mass of Bis(1,2,2,6,6-Non-readily biodegradable pentamethyl-4-piperidyl) sebacate

12.3. Bioaccumulative potential

Component

Bioaccumulation

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

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

VOC (2004/42/EC) : N.A. g/l 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)

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: 70, 75

SVHC Substances:

SVHC substances not present in a concentration $\geq 0.1\%$ (w/w)

National regulations

Produktregisteret Norge: 613099 Produktregister Danmark: 4119536 MAL-kode: 00-5 (1993) A+B: 00-5 (1993)

German Water Hazard Class (WGK)

2

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.			
H361f	Suspected of damaging fertility.			
H372	Causes damage to organs through prolon	Causes damage to organs through prolonged or repeated exposure.		
H400	Very toxic to aquatic life.	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 e	ffects.		
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
3.7/2	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
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1A	Calculation method
4.1/C3	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.

* Sheet model entirely changed in compliance to regulatory update.



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

1.1. Product identifier

Mixture identification: Trade name: KERAPOXY CQ comp. B Trade code: 9063999 UFI: 9E80-J05E-P008-GJ4J

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

Recommended use: Hardener for epoxy products

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: Mapei SK sro

Nádražná 39, Ivanka pri Dunaji, Slovakia

Tel: +421-2-4020 4511 - Fax: +421-2-2091-0846

Responsible: office@mapei.sk - sicurezza@mapei.it

1.4. Emergency telephone number

Tel: +421 2 5477 4166

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Skin Corr. 1B	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1A	May cause an allergic skin reaction.
Aquatic Acute 1	Very toxic to aquatic life.
Aquatic Chronic 1	Very toxic to aquatic life with long lasting effects.
	house a baselable and an divergence whether the

Adverse physicochemical, human health and environmental effects:

No other hazards 2.2. Label elements

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

Pictograms and Signal Words



Hazard statements:

- H314Causes severe skin burns and eye damage.H317May cause an allergic skin reaction.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

-	
P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/clothing and eye/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER.
P391	Collect spillage.

Contains:

3-aminomethyl-3,5,5trimethylcyclohexylamine

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: KERAPOXY CQ comp. B

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

Concentra tion (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥50 - <75 %	Fatty acids C18 unsaturated, reaction products with tetraethylenepentamine	CAS:1226892- 45-0, 68410-23- 1 EC:629-725-6	Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Corr. 1C, H314; Skin Sens. 1A, H317, M-Chronic:1, M- Acute:10	
≥20 - <25 %	3-aminomethyl-3,5,5- trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067- 00-9	Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119514687-32-xxxx
≥1 - <2.5 %	N'-(3-aminopropyl)-N,N- dimethylpropane-1,3-diamine	CAS:10563-29-8 EC:234-148-4	Acute Tox. 4, H302; Skin Corr. 1A, H314; Skin Sens. 1B, H317	01-2119970376-29-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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

Production Name

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 (CO2).

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.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

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.

6.3. Methods and material for containment and cleaning up

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

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

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency Remark
3-aminomethyl-3,5,5- trimethylcyclohexylamine CAS: 2855-13-2	0.06 mg/l	Fresh Water	
	0.006 mg/l	Marine water	
	0.23 mg/l	Intermittent release	
	5.784 mg/kg	Freshwater sediments	
	0.578 mg/kg	Marine water sediments	

	1.121 mg/kg	Soil
	3.18 mg/l	Microorganisms in sewage treatments
N'-(3-aminopropyl)-N,N- dimethylpropane-1,3- diamine CAS: 10563-29-8	0.0092 mg/l	Fresh Water
	0.00092 mg/l	Marine water
	0.092 mg/l	Intermittent release
	18.1 mg/l	Microorganisms in sewage treatments
	0.0336 mg/kg	Freshwater sediments

Derived No Effect Level. (DNEL)

	Worker Worke Industr Profes y ional		Exposure Route	Exposure Frequency Remark
3-aminomethyl-3,5,5- trimethylcyclohexylamine CAS: 2855-13-2	20.1 mg/m3		Human Inhalation	
N'-(3-aminopropyl)-N,N- dimethylpropane-1,3- diamine CAS: 10563-29-8	3.7 mg/m3	0.65 mg/m3	Human Inhalation	Long Term, systemic effects
	7.5 mg/m3		Human Inhalation	Short Term, systemic effects
	3.7 mg/m3	0.65 mg/m3	Human Inhalation	Long Term, local effects
	0.67 mg/kg		Human Dermal	Long Term, systemic effects
		0.2 mg/kg	Human Oral	Long Term, systemic effects

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.

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: gel Color: light yellow Odour: ammonia Odour threshold: Not available Melting point / freezing point: Not available Initial boiling point and boiling range: Not available Flammability: N.A. Upper/lower flammability or explosive limits: Not available Flash point: 100 °C (212 °F) Auto-ignition temperature: Not available Decomposition temperature: Not available pH: 11.00 Viscosity: 30,000.00 cPs Kinematic viscosity: Not available Solubility in water: partly soluble Solubility in oil: soluble Partition coefficient (n-octanol/water): Not available Vapour pressure: 0.01 Relative density: 1.06 g/cm3 Vapour density: Not available **Particle characteristics:** Particle size: Not available

9.2. Other information

Miscibility: Not available Conductivity: Not available 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 mixture:

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Corr. 1B(H314)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
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		
	Bas	ed on available data, the classification criteria are not met		
Toxicological informati	on on main compone	ents of the mixture:		
Fatty acids C18 unsaturated, reaction products with tetraethylenepentamine	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg		
3-aminomethyl-3,5,5- trimethylcyclohexylamine	a) acute toxicity	LC50 Inhalation Dust Rat > $5.01 \text{ mg/l } 4h$		
		LD50 Oral Rat = 1030 mg/kg		
		LD50 Skin Rat > 2000 mg/kg		
		LD50 Oral Rat = 1030 mg/kg		
		LD50 Skin Rat > 2000 mg/kg		
N'-(3-aminopropyl)-N,N- dimethylpropane-1,3- diamine	a) acute toxicity	LD50 Oral Rat = 1670 mg/kg		
	b) skin corrosion/irrit	ation Skin Corrosive Skin Rabbit Positive		
	d) respiratory or skin sensitisation	Skin Sensitization Skin Positive		

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:

Very toxic to aquatic organisms.

Very toxic 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 Acute 1(H400), Aquatic Chronic 1(H410)

List of components with eco-toxicological properties

(Component	Ident. Numb.	Ecotox Infos
	3-aminomethyl-3,5,5- rimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220- 666-8 - INDEX: 612-067-00-9	a) Aquatic acute toxicity : LC50 Fish = 110 mg/L 96
			a) Aquatic acute toxicity: EC50 Daphnia = 23 mg/L 48
			a) Aquatic acute toxicity : EC50 Daphnia = 388 mg/L 48
			a) Aquatic acute toxicity : EC50 Algae > 50 mg/L 72
			b) Aquatic chronic toxicity : NOEC Daphnia = $3 \text{ mg/L} - 21 \text{ d}$
			a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna 14.6 mg/L 48h EPA
			a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 37 mg/L 72h IUCLID
	N'-(3-aminopropyl)-N,N- dimethylpropane-1,3-diamine	CAS: 10563-29- 8 - EINECS: 234-148-4	a) Aquatic acute toxicity : LC50 Fish = 215 mg/L 96
			a) Aquatic acute toxicity : EC50 Daphnia = 9.2 mg/L 48
			a) Aquatic acute toxicity : EC50 Algae = 21 mg/L 72
			a) Aquatic acute toxicity : LC50 Fish Danio rerio > 100 mg/L 96h ECHA
12.2. Pei	rsistence and degradability		

12.3. Bioaccumulative potential

N.A.

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

14.1. UN number or ID number

2735

14.2. UN proper shipping name

ADR-Shipping Name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine - tetraethylenepentamine) IATA-Technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine - tetraethylenepentamine) IMDG-Technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (isophoronediamine - tetraethylenepentamine)

14.3. Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

14.4. Packing group

ADR-Packing Group: III IATA-Packing group: III IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: Yes Environmental Pollutant: Yes IMDG-EMS: F-A, S-B

14.6. Special precautions for user

Road and Rail ($\ensuremath{\mathsf{ADR}}\xspace-\ensuremath{\mathsf{RID}}\xspace$) :

ADR-Label: 8

ADR-Hazard identification number: NA ADR-Special Provisions: 274 ADR-Transport category (Tunnel restriction code): 3 (E) Air (IATA): IATA-Passenger Aircraft: 852 IATA-Cargo Aircraft: 856 IATA-Label: 8 IATA-Subsidiary hazards: -IATA-Erg: 8L IATA-Special Provisioning: A3 A803 Sea (IMDG) : IMDG-Stowage Code: Category A IMDG-Stowage Note: SG35 IMDG-Subsidiary hazards: -IMDG-Special Provisioning: 223 274 IMDG-EMS: F-A, S-B 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

VOC (2004/42/EC) : N.A. g/l 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)

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

Seveso III category	Lower-tier threshold
according to Annex 1, part 1	(tonnes)
Products belongs to category E1	100

Upper-tier threshold (tonnes) 200

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 $\geq 0.1\%$ (w/w)

National regulations

Produktregisteret Norge: 613100 Produktregister Danmark: 4119608 MAL-kode: 00-5 (1993) A+B: 00-5 (1993)

German Water Hazard Class (WGK)

2

15.2. Chemical safety assessment

Print date

SECTION 16: Other information

Code	Description	
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.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting e	ffects.
H412	Harmful to aquatic life with long lasting effe	ects.
Code	Hazard class and hazard category	Description
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/1C	Skin Corr. 1C	Skin corrosion, Category 1C
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
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
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/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
3.2/1B	Calculation method
3.3/1	Calculation method
3.4.2/1A	Calculation method
4.1/A1	Calculation method
4.1/C1	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.

* Sheet model entirely changed in compliance to regulatory update.