

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	Rasoepoxy C.A
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1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended use

Two-component fine epoxy mortar for surface smoothing for professional use - polyamine component

1.3 Details of the supplier of the safety data sheet

Company name	TORGGLER S.R.L.
Full address	Via Prati Nuovi 9
Town	Marlengo
Postal code	39020
Province	BZ
Country	Italy
Phone number	+39 0473 282400
Fax	+39 0473 282501
e-mail address of the competent person responsible for the Safety Data Sheet	reach@torggler.com

1.4 Emergency telephone number

For urgent inquiries refer to	+39 348 662 70 93 (08.00 - 17.30)
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Section 2 Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification

Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms

Signal word

Section 2

Danger

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

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.
P261	Avoid breathing vapours, dust.
P280	Wear protective gloves / eye protection / face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P264	Wash exposed body parts thoroughly after handling.

Contains

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine
 Amines, polyethylenepoly-, tetraethylenepentamine fraction
 3-aminopropyltriethoxysilane

VOC (Directive 2004/42/EC)

Two-pack reactive performance coatings for specific end use such as floors.

Volatile organic compounds - ready to use	8 g/l
VOC subcategory limit	140 g/l

2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.
 The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

Section 3 Composition/information on ingredients
3.2 Mixtures
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Concentration	$9.3 \leq x < 14.5 \%$
CAS number	68082-29-1
EC number	500-191-5
Registration Number	01-2119972320-44-xxxx
Hazard classification	<ul style="list-style-type: none"> ▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1A; H317 ▪ Eye Dam. 1; H318 ▪ Aquatic Chronic 2; H411

Amines, polyethylenepoly-, tetraethylenepentamine fraction

Concentration	$2.24 \leq x < 3.4 \%$
CAS number	90640-66-7
EC number	292-587-7
Registration Number	01-2119487290-37-xxxx

Section 3

Hazard classification	<ul style="list-style-type: none"> ▪ Acute Tox. 4; H302 ▪ Acute Tox. 4; H312 ▪ Skin Corr. 1B; H314 ▪ Skin Sens. 1; H317 ▪ Eye Dam. 1; H318 ▪ Aquatic Chronic 2; H411
LD50 (Oral):	1,716 mg/kg
LD50 (Dermal):	1,465 mg/kg

3-aminopropyltriethoxysilane

Concentration	$0.5 \leq x < 1 \%$
CAS number	919-30-2
EC number	213-048-4
INDEX number	612-108-00-0
Registration Number	01-2119480479-24-xxxx
Hazard classification	<ul style="list-style-type: none"> ▪ Acute Tox. 4; H302 ▪ Skin Corr. 1B; H314 ▪ Skin Sens. 1; H317 ▪ Eye Dam. 1; H318
Specific concentration limits	▪ Skin Sens. 1; H317: $\geq 3 \%$

AMMONIA

Concentration	$0.0054 \leq x < 0.0234 \%$
CAS number	1336-21-6
EC number	215-647-6
INDEX number	007-001-01-2
Registration Number	2119488876-14-xxxx
Hazard classification	<ul style="list-style-type: none"> ▪ Skin Corr. 1B; H314 ▪ Eye Dam. 1; H318 ▪ STOT SE 3; H335 ▪ Aquatic Acute 1; H400
M Factor (acute)	1
Specific concentration limits	▪ STOT SE 3; H335: $\geq 5 \%$
Classification note according to Annex VI to the CLP Regulation:	B
Substance with a community workplace exposure limit.	

ETHANOLAMINE

Concentration	$0.0054 \leq x < 0.0234 \%$
CAS number	141-43-5
EC number	205-483-3
INDEX number	603-030-00-8
Hazard classification	<ul style="list-style-type: none"> ▪ Acute Tox. 4; H302 ▪ Acute Tox. 4; H312 ▪ Skin Corr. 1B; H314 ▪ Eye Dam. 1; H318 ▪ Acute Tox. 4; H332 ▪ STOT SE 3; H335 ▪ Aquatic Chronic 3; H412
Specific concentration limits	▪ STOT SE 3; H335: $\geq 5 \%$
Substance with a community workplace exposure limit.	

1-METHOXY-2-PROPANOL

Concentration	$0.0054 \leq x < 0.0234 \%$
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Section 3

CAS number	107-98-2
EC number	203-539-1
INDEX number	603-064-00-3
Registration Number	01-2119457435-35-xxxx
Hazard classification	<ul style="list-style-type: none"> ▪ Flam. Liq. 3; H226 ▪ STOT SE 3; H336
Substance with a community workplace exposure limit.	

Quartz (SiO₂)

Concentration	$0.0054 \leq x < 0.0234 \%$
CAS number	14808-60-7
EC number	238-878-4
Hazard classification	<ul style="list-style-type: none"> ▪ STOT RE 1; H372
Substance with a community workplace exposure limit.	

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Section 4 First aid measures

4.1 Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuers protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a poison center/doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

Section 5

Section 5 Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10.

Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

Section 7 Handling and storage

7.1 Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

Section 7

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany)

None

7.3 Specific end use(s)

Information not available.

Section 8 Exposure controls/personal protection
8.1 Control parameters
Regulatory references

ACGIH	ACGIH 2025
European Union-OEL	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
Ireland-OELV	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
Malta-TLV	PROTECTION OF THE HEALTH AND SAFETY OF WORKERS FROM THE RISKS RELATED TO CHEMICAL AGENTS AT WORK REGULATIONS (S.L.424.24). PROTECTION OF WORKERS FROM THE RISKS RELATED TO EXPOSURE TO CARCINOGENS OR MUTAGENS AT WORK REGULATIONS (S.L.424.22)

3-aminopropyltriethoxysilane
Predicted no-effect concentration - PNEC

Normal value of STP microorganisms	0.81 mg/l
Normal value in fresh water	0.5 mg/l
Normal value for fresh water sediment	1.8 mg/kg
Normal value in marine water	0.05 mg/l
Normal value for marine water sediment	0.18 mg/kg
Normal value for water, intermittent release	2.05 mg/l

Health - Derived no-effect level - DNEL / DMEL
Local effect
Systemic effect

Workers, long-term, dermal		2 mg/kg bw/d
Workers, long-term, inhalation		14 mg/m ³

AMMONIA

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
European Union-OEL	14	20	36	50			--

Predicted no-effect concentration - PNEC

Normal value in fresh water	0.0011 mg/l
Normal value in marine water	0.0011 mg/l
Normal value for water, intermittent release	0.0068 mg/l

Health - Derived no-effect level - DNEL / DMEL
Local effect
Systemic effect

Consumers, short-term, dermal	0 mg/kg	68 mg/kg
Consumers, short-term, inhalation	0 mg/m ³	23.8 mg/m ³
Consumers, short-term, oral	Not available	6.8 mg/kg

Section 8

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, inhalation	0 mg/m ³	23.8 mg/m ³
Consumers, long-term, oral	Not available	6.8 mg/kg
Workers, short-term, dermal	0 mg/kg	68 mg/kg
Workers, short-term, inhalation	0 mg/m ³	47.6 mg/m ³
Workers, long-term, inhalation	0 mg/m ³	47.6 mg/m ³

ETHANOLAMINE

	TWA		STEL		CEILING		Remarks	
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm		
ACGIH	7.5	3	15	6			--	
European Union-OEL	2.5	1	7.6	3			Skin	
Ireland-OELV	2.5	1	7.6	3			Skin	
Malta-TLV	2.5	1	7.6	3			Skin	

1-METHOXY-2-PROPANOL

	TWA		STEL		CEILING		Remarks	
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm		
ACGIH	184	50	368	100			--	
European Union-OEL	375	100	568	150			Skin	
Ireland-OELV	375	100	568	150			--	
Malta-TLV	375	100	568	150			Skin	

Predicted no-effect concentration - PNEC

Normal value of STP microorganisms	100 mg/l
Normal value in fresh water	10 mg/l
Normal value for fresh water sediment	52.3 mg/kg
Normal value in marine water	1 mg/l
Normal value for marine water sediment	5.2 mg/kg
Normal value for the terrestrial compartment	4.59 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Workers, short-term, inhalation	553.5 mg/m ³	553.5 mg/m ³
Workers, long-term, dermal		183 mg/kg bw/d
Workers, long-term, inhalation		369 mg/m ³

Quartz (SiO₂)

	TWA		STEL		CEILING		Remarks	
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm		
ACGIH	0.025						Respiratory	
European Union-OEL	0.1						Respiratory	
European Union-OEL	0.1						--	RESPIR
Ireland-OELV	0.1						Respiratory	
Malta-TLV	0.1						Respiratory	As Silica

Amines, polyethylenepoly-, tetraethylenepentamine fraction

Predicted no-effect concentration - PNEC	
Normal value in fresh water	0.19 mg/l
Normal value for fresh water sediment	95.5 mg/kg
Normal value in marine water	0.038 mg/l
Normal value for marine water sediment	12.2 mg/kg

Section 8

Predicted no-effect concentration - PNEC

Normal value for the food chain (secondary poisoning) 19.1 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, short-term, inhalation		1,600 mg/m ³
Consumers, short-term, oral		20 mg/kg/d
Consumers, long-term, dermal	0.43 mg/cm ²	0.25 mg/kg bw/d
Consumers, long-term, oral		0.41 mg/kg/d
Workers, short-term, inhalation		5,380 mg/m ³
Workers, long-term, dermal	0.028 mg/cm ²	0.57 mg/kg bw/d

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

When choosing risk management measures and operating conditions, consult the exposure scenarios attached.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Protect your hands with gloves of the following type:

Protect your hands with gloves of the following type

Material	Thickness	Breakthrough time
Nitrile rubber (NBR)	0.4 mm	480 min
–	–	–
Butyl rubber (IIR)	0.5 mm	480 min
–	–	–

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344/EN ISO 13034). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Section 9

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid	Temperature: 23 °C (73.4 °F)
Colour	grey	
Odour	pungent	
Odour threshold	Not applicable	
Melting point / freezing point	Not available	
Initial boiling point	> 35 °C (> 95 °F)	
Flammability	Not applicable	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	110 °C (230 °F)	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
pH	11	
Kinematic viscosity	Tixotropico	
Dynamic viscosity	Tixotropico	
Solubility	partially soluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	1.6 g/cm ³	Temperature: 20 °C (68 °F)
Relative vapour density	Not available	

Particle characteristics

Information not available.

9.2 Other information

9.2.1 Information with regard to physical hazards

Information not available.

9.2.2 Other safety characteristics

Total solids 250°C	76 %	
VOC (Directive 2004/42/EC)	0.505 % – 8 g/l	

Section 10 Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

AMMONIA

Corrodes: aluminium, iron, zinc, copper, copper alloys

1-METHOXY-2-PROPANOL

Dissolves various plastic materials

Stable in normal conditions of use and storage

Absorbs and dissolves in water and in organic solvents. With air it may slowly form explosive peroxides.

Section 10

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

AMMONIA

Risk of explosion on contact with: strong acids, iodine

May react dangerously with: strong bases

ETHANOLAMINE

May react dangerously with: acrylonitrile, chloroepoxypropane, chlorosulphuric acid, hydrogen chloride, iron-sulphur compounds, acetic acid, acetic anhydride, mesityl oxide, nitric acid, sulphuric acid, strong acids, vinyl acetate, cellulose nitrate

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents, strong acids

10.4 Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

ETHANOLAMINE

Avoid exposure to: air, sources of heat

1-METHOXY-2-PROPANOL

Avoid exposure to: air

10.5 Incompatible materials**AMMONIA**

Incompatible with: silver, silver salts, lead, lead salts, zinc, zinc salts, hydrochloric acid, nitric acid, oleum, halogens, acrolein, nitromethane, acrylic acid

ETHANOLAMINE

Incompatible with: iron, strong acids, strong oxidants

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances, strong acids, alkaline metals

10.6 Hazardous decomposition products**AMMONIA**

May develop: nitric oxide

ETHANOLAMINE

May develop: nitric oxide, carbon oxides

Section 11 Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Quartz (SiO₂)

Prolonged and/or massive exposure to fine respirable particles capable of reaching the quartz-containing pulmonary alveoli can cause pulmonary fibrosis, commonly referred to as silicosis. The main symptoms of silicosis are cough and shortness of breath. People with silicosis have an increased risk of lung cancer. Dust exposure must be managed and monitored.

Section 11

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.1.1 Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

11.1.2 Information on likely routes of exposure
1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

11.1.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure
1-METHOXY-2-PROPANOL

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

11.1.4 Interactive effects

Information not available.

11.1.5 ACUTE TOXICITY

ATE (Inhalation) of the mixture	Not classified (no significant component)
ATE (Oral) of the mixture	> 2,000 mg/kg
ATE (Dermal) of the mixture	> 2,000 mg/kg

3-aminopropyltriethoxysilane

LD50 (Oral):	1,491 mg/kg	Species/guidelines: EPA OTS 798.1175, Rat
LD50 (Dermal):	4,076 mg/kg	Species/guidelines: EPA OTS 798.1100, Rabbit
LC50 (Inhalation vapours):	> 0.145 mg/l	Exposure duration: 4 hours

AMMONIA

LD50 (Oral):	350 mg/kg	Species/guidelines: Rat
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ETHANOLAMINE

LD50 (Oral):	1,089 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	2,504 mg/kg	
LC50 (Inhalation vapours):	> 1.3 mg/l	Exposure duration: 4 hours Species/guidelines: Rat
ATE (Dermal)	1,100 mg/kg	estimate from table 3.1.2 of Annex I of the CLP
ATE (Inhalation - vapours)	11 mg/l	estimate from table 3.1.2 of Annex I of the CLP

1-METHOXY-2-PROPANOL

LD50 (Oral):	4,016 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rat
LC50 (Inhalation vapours):	> 6,000	Exposure duration: 4 hours Species/guidelines: Rat

Amines, polyethylenepoly-, tetraethylenepentamine fraction

LD50 (Oral):	1,716 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	1,465 mg/kg	Species/guidelines: Rabbit

Section 11

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

LD50 (Oral):	> 2,000 mg/kg	
LD50 (Dermal):	> 2,000 mg/kg	

11.1.6 SKIN CORROSION/IRRITATION

Causes skin irritation.

11.1.7 SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage.

11.1.8 RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

11.1.9 GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

11.1.10 CARCINOGENICITY

Does not meet the classification criteria for this hazard class

11.1.11 REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

11.1.12 STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

11.1.13 STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

11.1.14 ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2 Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

Section 12 Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity
AMMONIA

EC50 - for Crustacea	20 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	47 mg/l	Exposure duration: 96 hours Species/guidelines: Channa punctata

Section 12

ETHANOLAMINE

Chronic NOEC for Fish	1.2 mg/l	Species/guidelines: Oryzias latipes
Chronic NOEC for Crustacea	0.85 mg/l	Species/guidelines: Daphnia magna

1-METHOXY-2-PROPANOL

EC50 - for Crustacea	23,300 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	> 1,000 mg/l	Exposure duration: 96 hours Species/guidelines: Onchorhynchus mykiss
EC50 - for Algae / Aquatic Plants	> 1,000 mg/l	Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata

Amines, polyethylenepoly-, tetraethylenepentamine fraction

EC50 - for Crustacea	31.1 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	330 mg/l	Exposure duration: 96 hours
EC50 - for Algae / Aquatic Plants	20 mg/l	Exposure duration: 72 hours

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

EC50 - for Crustacea	7.07 mg/l	Exposure duration: 48 hours
LC50 - for Fish	7.07 mg/l	Exposure duration: 96 hours
EC50 - for Algae / Aquatic Plants	4.34 mg/l	Exposure duration: 72 hours

12.2 Persistence and degradability

3-aminopropyltriethoxysilane

Degradability	Unavailable
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AMMONIA

Degradability	Unavailable
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ETHANOLAMINE

Solubility in water	$1,000 \leq x \leq 10,000$ mg/l
Degradability	Rapidly degradable

1-METHOXY-2-PROPANOL

Solubility in water	$1,000 \leq x \leq 10,000$ mg/l
Degradability	Rapidly degradable

Amines, polyethylenepoly-, tetraethylenepentamine fraction

Degradability	NOT rapidly degradable
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Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Solubility in water	40 mg/l
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12.3 Bioaccumulative potential

ETHANOLAMINE

Partition coefficient n-octanol/water	-2.3 LogKow
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1-METHOXY-2-PROPANOL

Partition coefficient n-octanol/water	< 1 LogKow
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Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

Partition coefficient n-octanol/water	10.34 LogKow
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Section 12

12.4 Mobility in soil

ETHANOLAMINE

Partition coefficient soil/water	-0.5646 LogKoc
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12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6 Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7 Other adverse effects

Information not available.

Section 13 Disposal considerations

13.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Hazardous waste classification - Reg. (UE) 1357/2014

HP 4 – Irritant — skin irritation and eye damage

HP 13 – Sensitising

HP 14 – Ecotoxic

Section 14 Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) 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

Section 14

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

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
Seveso Category - Directive 2012/18/EU:

None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

	Restrictions	Registration Number EU
Product restrictions	3, 40	
Contained substance		
	75	

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)
Registration Number EU

 On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
Authorisation Number
Sunset date
Registration Number EU

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Regulation (EU) 2019/1021 - on persistent organic pollutants

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC)

Two-pack reactive performance coatings for specific end use such as floors.

Section 15

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK2 – Hazard to waters

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

Section 16 Other information
Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
Eye Dam. 1	Serious eye damage, category 1
Flam. Liq. 3	Flammable liquid, category 3
Skin Corr. 1B	Skin corrosion, category 1B
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H226	Flammable liquid and vapour.
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Legend

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EC50: Effective concentration (required to induce a 50% effect)
- EC: Identifier in ESIS (European archive of existing substances)
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP

Section 16

Legend

- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

General Bibliography

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EC) 790/2009 (I ATP CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II ATP CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III ATP CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV ATP CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V ATP CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI ATP CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII ATP CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII ATP CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX ATP CLP)
 13. Regulation (EU) 2017/776 (X ATP CLP)
 14. Regulation (EU) 2018/669 (XI ATP CLP)
 15. Regulation (EU) 2019/521 (XII ATP CLP)
 16. Delegated Regulation (UE) 2018/1480 (XIII ATP CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (EU) 2020/217 (XIV ATP CLP)
 19. Delegated Regulation (EU) 2020/1182 (XV ATP CLP)
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 22. Delegated Regulation (EU) 2022/692 (XVIII ATP CLP)
 23. Delegated Regulation (EU) 2023/707
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 28. Regulation (EU) 2024/2865
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- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website

Section 16

General Bibliography

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Calculation methods for classification

Chemical and physical hazards:

Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards:

Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards:

Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.