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.B

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 - epoxy 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)

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 1	H317	May cause an allergic skin reaction.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic 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
Danger

Hazard statements	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H411	Toxic 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.
P391	Collect spillage.
P273	Avoid release to the environment.
P310	Immediately call a poison center/doctor.
P261	Avoid breathing.
P280	Wear protective gloves / eye protection / face protection.

Contains
Portland cement clinker, Cr(VI) < 2 ppm
bis-[4-(2,3-epoxipropoxi)phenyl]propane
Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran
Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled
HEXANE-1,6-DIOL DIACRYLATE

VOC (Directive 2004/42/EC)	
Two-pack reactive performance coatings for specific end use such as floors.	
Volatile organic compounds - ready to use	41 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 ≥ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

As soon as the dry mixture comes into contact with water or becomes moist, a strongly alkaline solution is formed. Due to its high alkalinity, wet mortar can cause irritation to the skin and eyes. Especially in case of prolonged contact (e.g. if kneeling in wet mortar for a long time) there is a risk that its alkalinity will cause serious skin damage. The percentage of respirable crystalline silicon oxide is less than 1%. Therefore, the product is not subject to identification requirements. However, the use of respiratory protection is recommended. The dust produced by the dry mixture can irritate the respiratory tract. Repeated inhalation of high amounts of dust increases the risk of lung disease.

Section 3 Composition/information on ingredients

3.2 Mixtures

Portland cement clinker, Cr(VI) < 2 ppm

Concentration	51 ≤ x < 62 %
CAS number	65997-15-1
EC number	266-043-4

Section 3

Hazard classification	▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1; H317 ▪ Eye Dam. 1; H318 ▪ STOT SE 3; H335

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

Concentration	26 ≤ x < 40 %
CAS number	1675-54-3
EC number	216-823-5
INDEX number	603-073-00-2
Registration Number	01-2119456619-26-xxxx
Hazard classification	▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1; H317 ▪ Eye Irrit. 2; H319 ▪ Aquatic Chronic 2; H411
Specific concentration limits	▪ Skin Irrit. 2; H315: ≥ 5 % ▪ Eye Irrit. 2; H319: ≥ 5 %

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran

Concentration	8.9 ≤ x < 13.9 %
CAS number	9003-36-5
EC number	500-006-8
Registration Number	01-2119454392-40-xxxx
Hazard classification	▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1; H317 ▪ Aquatic Chronic 2; H411

PROPAN-2-OL

Concentration	2.24 ≤ x < 3.4 %
CAS number	67-63-0
EC number	200-661-7
INDEX number	603-117-00-0
Hazard classification	▪ Flam. Liq. 2; H225 ▪ Eye Irrit. 2; H319 ▪ STOT SE 3; H336

Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

Concentration	2.24 ≤ x < 3.4 %
CAS number	8007-24-7
EC number	700-991-6
Hazard classification	▪ Acute Tox. 4; H302 ▪ Acute Tox. 4; H312 ▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1; H317 ▪ Eye Dam. 1; H318
ATE (Oral)	500 mg/kg
LD50 (Dermal):	2,000 mg/kg

HEXANE-1,6-DIOL DIACRYLATE

Concentration	0.5 ≤ x < 1 %
CAS number	13048-33-4
EC number	235-921-9
INDEX number	607-109-00-8

Section 3

Registration Number	01-2119484737-22-xxxx
Hazard classification	▪ Skin Irrit. 2; H315 ▪ Skin Sens. 1; H317 ▪ Eye Irrit. 2; H319 ▪ Aquatic Acute 1; H400 ▪ Aquatic Chronic 2; H411
M Factor (acute)	1
Classification note according to Annex VI to the CLP Regulation:	D

TOLUENE

Concentration	0.5 ≤ x < 1 %
CAS number	108-88-3
EC number	203-625-9
INDEX number	601-021-00-3
Registration Number	01-2119471310-51-xxxx
Hazard classification	▪ Flam. Liq. 2; H225 ▪ Asp. Tox. 1; H304 ▪ Skin Irrit. 2; H315 ▪ STOT SE 3; H336 ▪ Repr. 2; H361d ▪ STOT RE 2; H373 ▪ Aquatic Chronic 3; H412
Substance with a community workplace exposure limit.	

ETHYL ACETATE

Concentration	0.059 ≤ x < 0.257 %
CAS number	141-78-6
EC number	205-500-4
INDEX number	607-022-00-5
Registration Number	01-2119475103-46-xxxx
Hazard classification	▪ Flam. Liq. 2; H225 ▪ Eye Irrit. 2; H319 ▪ STOT SE 3; H336
Additional classification	EUH066
Substance with a community workplace exposure limit.	

Quartz (SiO2)

Concentration	0.0144 ≤ x < 0.062 %
CAS number	14808-60-7
EC number	238-878-4
Hazard classification	▪ STOT RE 1; H372
Substance with a community workplace exposure limit.	

CYCLOHEXANE

Concentration	0.0059 ≤ x < 0.0257 %
CAS number	110-82-7
EC number	203-806-2
INDEX number	601-017-00-1
Registration Number	01-2119463273-41-xxxx

Section 3

Hazard classification	▪ Flam. Liq. 2; H225 ▪ Asp. Tox. 1; H304 ▪ Skin Irrit. 2; H315 ▪ Eye Irrit. 2; H319 ▪ STOT SE 3; H336 ▪ Aquatic Acute 1; H400 ▪ Aquatic Chronic 1; H410
M Factor (acute)	1
M Factor (chronic)	1
Substance with a community workplace exposure limit.	

FORMALDEHYDE

Concentration	0.0079 ≤ x < 0.01 %
CAS number	50-00-0
EC number	200-001-8
INDEX number	605-001-00-5
Registration Number	01-2119488953-20-xxxx
Hazard classification	▪ Acute Tox. 4; H302 ▪ Skin Corr. 1B; H314 ▪ Skin Sens. 1A; H317 ▪ Eye Dam. 1; H318 ▪ Acute Tox. 2; H330 ▪ Muta. 2; H341 ▪ Carc. 1B; H350
Specific concentration limits	▪ Skin Irrit. 2; H315: 5 ≤ x < 25 % ▪ Skin Corr. 1B; H314: ≥ 25 % ▪ Eye Irrit. 2; H319: 5 ≤ x < 25 % ▪ Eye Dam. 1; H318: ≥ 25 %
Classification note according to Annex VI to the CLP Regulation:	B – D – F
Additional classification	EUH071
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 Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Excess pressure may form in containers exposed to fire at a risk of explosion. 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

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. 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)

HEXANE-1,6-DIOL DIACRYLATE

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	2.7 mg/l
Normal value in fresh water	0.00723 mg/l
Normal value for fresh water sediment	0.493 mg/kg

Section 8

Predicted no-effect concentration - PNEC	
Normal value in marine water	0.00072 mg/l
Normal value for marine water sediment	0.049 mg/kg
Normal value for the terrestrial compartment	0.094 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Workers, long-term, dermal		2.77 mg/kg bw/d
Workers, long-term, inhalation		24.5 mg/m³

CYCLOHEXANE

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH	344	100					--	
European Union-OEL	700	200					--	
Ireland-OELV	700	200					--	
Malta-TLV	700	200					--	

TOLUENE

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH		20					--	
European Union-OEL	192	50	384	100			Skin	
Ireland-OELV	192	50	384	100			Skin	
Malta-TLV	192	50	384	100			Skin	

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	13.61 mg/l
Normal value in fresh water	0.68 mg/l
Normal value for fresh water sediment	16.39 mg/kg
Normal value in marine water	0.68 mg/l
Normal value for marine water sediment	16.39 mg/kg
Normal value for the terrestrial compartment	2.89 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Workers, short-term, inhalation	384 mg/m³	384 mg/m³
Workers, long-term, dermal		384 mg/kg bw/d
Workers, long-term, inhalation	192 mg/m³	192 mg/m³

PROPAN-2-OL

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH	492	200	983	400			--	
Ireland-OELV		200		400			Skin	

FORMALDEHYDE

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH		0.1		0.3			--	
European Union-OEL	0.37	0.3	0.74	0.6			--	
Ireland-OELV	0.37	0.3	0.738	0.6			--	
Malta-TLV	0.37	0.3	0.74	0.6			--	

Section 8

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	13.61 mg/l
Normal value in fresh water	0.68 mg/l
Normal value for fresh water sediment	16.39 mg/kg
Normal value in marine water	0.68 mg/l
Normal value for marine water sediment	16.39 mg/kg
Normal value for the terrestrial compartment	2.89 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Workers, short-term, inhalation	384 mg/m³	384 mg/m³
Workers, long-term, dermal		384 mg/kg bw/d
Workers, long-term, inhalation	192 mg/m³	192 mg/m³

ETHYL ACETATE

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH	1,441	400					--	
European Union-OEL	734	200	1,468	400			--	
Ireland-OELV		200		400			--	
Malta-TLV	734	200	1,468	400			--	

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	650 mg/l
Normal value in fresh water	0.24 mg/l
Normal value for fresh water sediment	1.15 mg/kg/d
Normal value in marine water	0.024 mg/l
Normal value for marine water sediment	0.115 mg/kg/d
Normal value for the terrestrial compartment	0.148 mg/kg/d
Normal value for the food chain (secondary poisoning)	200 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, short-term, inhalation	734 mg/m³	734 mg/m³
Consumers, long-term, dermal	Not available	37 mg/kg bw/d
Consumers, long-term, inhalation	367 mg/m³	367 mg/m³
Consumers, long-term, oral	Not available	4.5 mg/kg bw/d
Workers, short-term, inhalation	1,468 mg/m³	1,468 mg/m³
Workers, long-term, dermal	Not available	63 mg/kg bw/d
Workers, long-term, inhalation	734 mg/m³	734 mg/m³

Quartz (SiO2)

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	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

Portland cement clinker, Cr(VI) < 2 ppm

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, inhalation	Not available	1 mg/m³

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	10 mg/l
Normal value in fresh water	0.003 mg/l
Normal value for fresh water sediment	0.294 mg/kg
Normal value in marine water	0.0003 mg/l
Normal value for marine water sediment	0.029 mg/kg
Normal value for the terrestrial compartment	0.237 mg/kg

Health - Derived no-effect level - DNEL / DMEL	**Local effect**	**Systemic effect**
Workers, short-term, dermal	0.0083 mg/cm²	
Workers, long-term, dermal		104.51 mg/kg bw/d
Workers, long-term, inhalation		29.39 mg/m³

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

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	10 mg/l
Normal value in fresh water	0.006 mg/l
Normal value for fresh water sediment	0.341 mg/kg/d
Normal value in marine water	0.001 mg/l
Normal value for marine water sediment	0.0341 mg/kg/d
Normal value for the terrestrial compartment	0.065 mg/kg/d
Normal value for the food chain (secondary poisoning)	
Normal value for fresh water, intermittent release	0.002 mg/l
Normal value for marine water, intermittent release	0.018 mg/l

Health - Derived no-effect level - DNEL / DMEL	**Local effect**	**Systemic effect**
Consumers, long-term, dermal		0.0893 mg/kg/d
Consumers, long-term, inhalation		0.87 mg/m³
Consumers, long-term, oral		0.5 mg/kg/d
Workers, long-term, dermal		0.75 mg/kg/d
Workers, long-term, inhalation		0.493 mg/m³

Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

Predicted no-effect concentration - PNEC	
Normal value in fresh water	0.003 mg/l
Normal value for fresh water sediment	0.97 mg/kg
Normal value for marine water sediment	0.088 mg/kg
Normal value for the terrestrial compartment	6.71 mg/kg
Normal value for the food chain (secondary poisoning)	10 mg/kg
Normal value for water, intermittent release	0.03 mg/l

Health - Derived no-effect level - DNEL / DMEL	**Local effect**	**Systemic effect**
Workers, long-term, dermal		2.1 mg/kg/d
Workers, long-term, inhalation		7.4 mg/m³

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.

Section 8

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 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	characteristic	
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	not soluble in water	
Kinematic viscosity	Not available	
Dynamic viscosity	50,000 Pl	Temperature: 20 °C (68 °F)
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	1.8 g/cm³	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	98 %	
VOC (Directive 2004/42/EC)	2.2889 % – 41.2 g/l	
Volatile carbon	1.5656 % – 28.18 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.

TOLUENE

Avoid exposure to: light

FORMALDEHYDE

Decomposes under the effect of heat
Acqueous solutions are stabilised with methanol but tend to polymerise over time.

ETHYL ACETATE

ETHYL ACETATE: decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

Portland cement clinker, Cr(VI) < 2 ppm

Reacts with: water

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

CYCLOHEXANE

May react violently with: strong oxidants, liquid nitric oxide
Forms explosive mixtures with: air

TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic

acid, organic nitrocompounds
May form explosive mixtures with: air
May react dangerously with: strong oxidising agents, strong acids, sulphur

FORMALDEHYDE

Risk of explosion on contact with: nitromethane, nitrogen dioxide, hydrogen peroxide, phenoles, performic acid, nitric acid
May polymerise on contact with: strong oxidising agents, alkalis
May react dangerously with: hydrochloric acid, magnesium carbonate, sodium hydroxide, perchloric acid, aniline
Forms explosive mixtures with: air

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum
May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide
Forms explosive mixtures with: air
ETHYL ACETATE: risk of explosion on contact with: metals, alkalis, hydrides. oleum. can react violently with: fluoride, strong oxidising agents, chlorosulfuric acid, potassium tert-butoxide. Forms explosive mixtures with the air.

10.4 Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

FORMALDEHYDE

Avoid exposure to: light, sources of heat, naked flames

ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames
ETHYL ACETATE: avoid exposure to light, sources of heat and naked flames.

Portland cement clinker, Cr(VI) < 2 ppm

Avoid exposure to: moisture

10.5 Incompatible materials

CYCLOHEXANE

Incompatible materials:

FORMALDEHYDE

Incompatible with: acids, alkalis, ammonia, tannin, strong oxidants, phenoles, copper salts, silver, iron

ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, chlorosulphuric acid
ETHYL ACETATE: acids and bases, strong oxidising agents; aluminium and some plastics, nitrates and chlorosulphuric acid.

Portland cement clinker, Cr(VI) < 2 ppm

Incompatible with: acids, ammonium salts
Avoid contact with: aluminium powder

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

FORMALDEHYDE

When heated to decomposition releases: methanol, carbon monoxide

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.

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

CYCLOHEXANE

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.

TOLUENE

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

CYCLOHEXANE

Irritating for the skin and mucous membranes, and may be absorbed by the skin; nerve damage can occur at high doses and is largely due to the cyclohexanone, its metabolite.

TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

11.1.4 Interactive effects

CYCLOHEXANE

The substance may enhance the effects of agents such as tri-ortho-cresyl phosphate (TOCP).

TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

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

HEXANE-1,6-DIOL DIACRYLATE

LD50 (Oral):	> 5,000 mg/kg	
LD50 (Dermal):	3,650 mg/kg	

CYCLOHEXANE

LD50 (Oral):	> 5,000 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	13.9 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

TOLUENE

LD50 (Oral):	5,580 mg/kg	Species/guidelines: Rat

LD50 (Dermal):	12,124 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	28.1 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

PROPAN-2-OL

LD50 (Oral):	4,710 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	12,800 mg/kg	Species/guidelines: Rat
LC50 (Inhalation vapours):	72.6 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

FORMALDEHYDE

LD50 (Oral):	100 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	270 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation gas):	100 ppm	Exposure duration: 4 hours
LC50 (Inhalation vapours):	0.588 mg/l	Exposure duration: 4 hours Species/guidelines: Rat
ATE (Oral)	500 mg/kg	estimate from table 3.1.2 of Annex I of the CLP
ATE (Inhalation - gas)	100 ppm	estimate from table 3.1.2 of Annex I of the CLP

ETHYL ACETATE

LD50 (Oral):	4,934 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	> 22.5 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran

LD50 (Oral):	> 5,000 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rat

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

LD50 (Oral):	15,000 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	23,000 mg/kg	Species/guidelines: Rat

Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

LD50 (Oral):	> 2,000 mg/kg	
LD50 (Dermal):	2,000 mg/kg	
ATE (Oral)	500 mg/kg	estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

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

TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

11.1.11 REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

11.1.12 STOT - SINGLE EXPOSURE

May cause respiratory irritation.

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

HEXANE-1,6-DIOL DIACRYLATE

EC50 - for Crustacea	2.7 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia
LC50 - for Fish	0.38 mg/l	Exposure duration: 96 hours Species/guidelines: Fish
EC50 - for Algae / Aquatic Plants	2.33 mg/l	Exposure duration: 72 hours Species/guidelines: Algae
Chronic NOEC for Fish	0.072 mg/l	
Chronic NOEC for Algae / Aquatic Plants	0.9 mg/l	

CYCLOHEXANE

EC50 - for Crustacea	3.89 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	4.53 mg/l	Exposure duration: 96 hours Species/guidelines: Pimephales promelas
EC50 - for Algae / Aquatic Plants	32.7 mg/l	Exposure duration: 72 hours Species/guidelines: Chlorella vulgaris

TOLUENE

EC50 - for Crustacea	3.78 mg/l	Exposure duration: 48 hours

LC50 - for Fish	5.5 mg/l	Exposure duration: 96 hours
EC50 - for Algae / Aquatic Plants	134 mg/l	Exposure duration: 72 hours

FORMALDEHYDE

EC50 - for Crustacea	3.78 mg/l	Exposure duration: 48 hours
LC50 - for Fish	5.5 mg/l	Exposure duration: 96 hours
EC50 - for Algae / Aquatic Plants	134 mg/l	Exposure duration: 72 hours

ETHYL ACETATE

EC50 - for Crustacea	165 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	230 mg/l	Exposure duration: 96 hours Species/guidelines: Pimephales promelas
Chronic NOEC for Crustacea	2.4 mg/l	Species/guidelines: Daphnia pulex
Chronic NOEC for Algae / Aquatic Plants	> 100 mg/l	Species/guidelines: Scenedesmus subspicatus

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran

EC50 - for Crustacea	2.55 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	2.54 mg/l	Exposure duration: 96 hours Species/guidelines: Fish
EC50 - for Algae / Aquatic Plants	1.8 mg/l	Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata
Chronic NOEC for Crustacea	0.3 mg/l	Species/guidelines: 21d Daphnia magna

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

EC50 - for Crustacea	1.8 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	2 mg/l	Exposure duration: 96 hours Species/guidelines: Oncorhynchus mykiss
EC50 - for Algae / Aquatic Plants	> 11 mg/l	Exposure duration: 72 hours Species/guidelines: freshwater algae
Chronic NOEC for Crustacea	0.3 mg/l	Species/guidelines: Daphnia
Chronic NOEC for Algae / Aquatic Plants	4.2 mg/l	Species/guidelines: freshwater algae

Cashew (Anacardium occidentale) Nutshell Extract, Decarboxylated, Distilled

LC50 - for Fish	1,000 mg/l	Exposure duration: 96 hours
EC50 - for Algae / Aquatic Plants	1,300 mg/l	Exposure duration: 72 hours

12.2 Persistence and degradability

HEXANE-1,6-DIOL DIACRYLATE

Solubility in water	343 mg/l	
Degradability	Rapidly degradable	

CYCLOHEXANE

Solubility in water	0.1 ≤ x ≤ 100 mg/l	
Degradability	Rapidly degradable	

TOLUENE

Solubility in water	100 ≤ x ≤ 1,000 mg/l	
Degradability	Rapidly degradable	

PROPAN-2-OL

Degradability	Rapidly degradable	

FORMALDEHYDE

Solubility in water	55,000 mg/l	
Degradability	Rapidly degradable	

ETHYL ACETATE

Solubility in water	80 ≤ x ≤ 83.1 g/l	
Degradability	Rapidly degradable	

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran

Degradability	NOT rapidly degradable	

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

Degradability	NOT rapidly degradable	

12.3 Bioaccumulative potential

HEXANE-1,6-DIOL DIACRYLATE

Partition coefficient n-octanol/water	2.81 LogKow

CYCLOHEXANE

Partition coefficient n-octanol/water	3.44 LogKow

TOLUENE

Bioconcentration factor	90
Partition coefficient n-octanol/water	2.73 LogKow

PROPAN-2-OL

Partition coefficient n-octanol/water	0.05 LogKow

FORMALDEHYDE

Bioconcentration factor	90
Partition coefficient n-octanol/water	2.73 LogKow

ETHYL ACETATE

Bioconcentration factor	30
Partition coefficient n-octanol/water	0.68 LogKow

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran

Partition coefficient n-octanol/water	3.6 LogKow

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

Partition coefficient n-octanol/water	3.242 LogKow

12.4 Mobility in soil

HEXANE-1,6-DIOL DIACRYLATE

Partition coefficient soil/water	0.322 LogKoc

CYCLOHEXANE

Partition coefficient soil/water	2.89 LogKoc

FORMALDEHYDE

Partition coefficient soil/water	1.202 LogKoc

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 ≥ 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.
Waste transportation may be subject to ADR restrictions.
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 5 – Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 13 – Sensitising
HP 14 – Ecotoxic

Section 14 Transport information

14.1 UN number or ID number

ADR / RID	IMDG	IATA
UN 3082	UN 3082	UN 3082

- In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.
- In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.
- In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2 UN proper shipping name

ADR / RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane – Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran)

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IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane – Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran)
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane – Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxiran)

14.3 Transport hazard class(es)

	Class	Label	
ADR / RID	9	9	
IMDG	9	9	
IATA	9	9	

14.4 Packing group

ADR / RID	IMDG	IATA
III	III	III

14.5 Environmental hazards

ADR / RID	Environmentally Hazardous	
IMDG	Marine Pollutant	
IATA	Environmentally Hazardous	

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

14.6 Special precautions for user

ADR / RID			
Hazard identification No. - Kemler	90	Limited Quantities	5 L
Tunnel restriction code	(-)	Special provisions	274, 335, 375, 601, 650
IMDG			
EmS	F-A, S-F	Limited Quantities	

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IATA			
Maximum quantity (Cargo)	450 L	Packaging instructions (Cargo)	964
Maximum quantity (Passengers)	450 L	Packaging instructions (Passengers)	964
Special provisions	A97, A158, A197, A215		

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:

E2

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	
TOLUENE	48	01-2119471310-51-xxxx
FORMALDEHYDE	72, 77	01-2119488953-20-xxxx

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 ≥ 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.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK3 – Severe 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. 2	Acute toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic 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
Asp. Tox. 1	Aspiration hazard, category 1
Carc. 1B	Carcinogenicity, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 2	Flammable liquid, category 2
Muta. 2	Germ cell mutagenicity, category 2
Repr. 2	Reproductive toxicity, category 2
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 RE 2	Specific target organ toxicity - repeated exposure, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

Section 16

Text of hazard (H) indications mentioned in section 2-3 of the sheet:	
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.

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
- 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)

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General Bibliography

17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV ATP CLP)
19. Delegated Regulation (EU) 2020/1182 (XV ATP CLP)
20. Delegated Regulation (EU) 2021/643 (XVI ATP CLP)
21. Delegated Regulation (EU) 2021/849 (XVII ATP CLP)
22. Delegated Regulation (EU) 2022/692 (XVIII ATP CLP)
23. Delegated Regulation (EU) 2023/707
24. Delegated Regulation (EU) 2023/1434 (XIX ATP CLP)
25. Delegated Regulation (EU) 2023/1435 (XX ATP CLP)
26. Delegated Regulation (EU) 2024/197 (XXI ATP CLP)
27. Delegated Regulation (EU) 2024/2564 (XXII ATP CLP)
28. Regulation (EU) 2024/2865
29. Delegated Regulation (EU) 2025/1222 (XXIII ATP CLP)

- 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
- 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.