

Cloeren Technology Epocloer 3000 Plus Härter

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Revision date: 12/21/2022 Version: 4.0

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Epocloer 3000 Plus Härter
Product code	:	Epocloer011/013

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

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture : Professional use: Sample preparation for metallography

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cloeren Technology GmbH In Petersholz 44 DE– 41844 Wegberg Germany T 02432/8902510 - F 02432/8902519 info@cloeren.de - www.cloeren.de

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Germany	Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord) Universitätsmedizin Göttingen - Georg- August-Universität	Robert-Koch Straße 40 37075 Göttingen	+49 (0) 551 19240	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 12	72/2008 [CLP]	
Hazard pictograms (CLP)		
Signal word (CLP)	GHS05 : Danger	GHS07

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazard statements (CLP)	 H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	 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, a doctor. P362+P364 - Take off contaminated clothing and wash it before reuse. P405 - Store locked up. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Extra phrases	: Contains epoxy componts . Can cause allergic reactions.
2.3. Other hazards	

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Other information

: Hazardous components for labeling: 3,6-Diazaoctan-1,8-diamin.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: Mixture of the substances listed below with harmless additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Polyethylene poly, triethylenetetramine fraction	CAS-No.: 90640-67-8 EC-No.: 292-588-2	≤ 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Benzyl alcohol	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5	5 – 15	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	: Call a physician immediately.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.	
First-aid measures after eye contact	 Rinse cautiously with water for several minutes. Remove contact lenses, if present and eas to do. Continue rinsing. Call a physician immediately. 	
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	Burns. May cause an allergic skin reaction.Serious damage to eyes.Burns.
4.3. Indication of any immediate med	ical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the subs	tance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	

6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containm	nent and cleaning up
Methods for cleaning up Other information	: Take up liquid spill into absorbent material. : Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and stor	age
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, i	ncluding any incompatibilities
Storage conditions Storage area	 Store in a closed container. Store locked up. Store in a well-ventilated place. Keep cool. storage class 8 A Combustible corrosive substances.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Benzyl alcohol (100-51-6)	
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Benzylalkohol
AGW (OEL TWA) [1]	22 mg/m ³
AGW (OEL TWA) [2]	5 ppm
Peak exposure limitation factor	2(I)
Remark	DFG;H;Y;11
Regulatory reference	TRGS900

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hand protection:

The glove material must be impermeable and resistant to the product / the substance / the be preparation. Selection of the glove material taking into account the penetration times, permeation rates and the Degradation. Recommendation: uvex u-chem 3000 (DIN EN 374) Material: nitrile rubber Material thickness: 0.5 mm Value for the permeation:> 120 min (level 4) Recommendation: uvex u-fit strong N2000 (DIN EN 374) Material: nitrile rubber Material: nitrile rubber Material thickness: 0.2 mm Value for the permeation:> 30 min (level 2)

8.2.2.3. Respiratory protection

Respiratory protection:

Ensure adequate ventilation or use a fume cupboard. No respiratory protection is required with normal use.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical p	properties
9.1. Information on basic physical and ch	hemical properties
Physical state	: Liquid
Colour	: light yellow.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: > 200 °C
Flammability	: 325 °C
	Non flammable.
Explosive properties	: Product is not explosive.
Oxidising properties	: Not self-igniting.
Explosive limits	: Not available
Lower explosion limit	: 1.3 vol %
Upper explosion limit	: 13 vol %
Flash point	: > 100 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: >7
Viscosity, kinematic	: Not available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 0.1 hPa
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defi	ned in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified
Benzyl alcohol (100-51-6)	
LD50 oral	1580 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1410 - 1770
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	> 4.178 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Skin corrosion/irritation	: Causes severe skin burns. pH: > 7
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: > 7
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Polyethylene poly, triethylenetetramine fra	ction (90640-67-8)
NOAEL (chronic, oral, animal/male, 2 years)	 ≥ 42 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 451 (Carcinogenicity Studies), Remarks on results: other:Effect type: toxicity (migrated information)
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Polyethylene poly, triethylenetetramine fraction (90640-67-8)		
LOAEL (oral, rat, 90 days) 50 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)		
NOAEL (oral, rat, 90 days)	50 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	
Benzyl alcohol (100-51-6)		
NOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: other:OECD Guideline 451 (Carcinogenicity Studies)	
Aspiration hazard :	Not classified	
Benzyl alcohol (100-51-6)		
Viscosity, kinematic	0.005 mm²/s	
11.2. Information on other hazards		

No additional information available

SECTION 12: Ecological information

10	 	
12.1	 OXI	CITV
14.	 UNI	CILY

Ecology - general : Hazardous to the aquatic environment, short-term : (acute) Hazardous to the aquatic environment, long-term : (chronic) Not rapidly degradable	Harmful to aquatic life with long lasting effects. Not classified Harmful to aquatic life with long lasting effects.
Polyethylene poly, triethylenetetramine fraction	on (90640-67-8)
LC50 - Fish [1]	330 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	31.1 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	20 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	230 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	770 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	500 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	76828 mg/l Test organisms (species): other:
NOEC (chronic)	51 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	48897 mg/l Test organisms (species): other: Duration: '30 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Endocrine disrupting properties
No additional information available
12.7. Other adverse effects

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

No additional information available

13.1. Waste treatment methods

Waste treatment methods

SECTION 13: Disposal considerations

SECTION 14: Transpo	rt information			
In accordance with ADR / IME	DG / IATA / ADN / RID			
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber			
UN 2259	UN 2259	UN 2259	UN 2259	UN 2259
14.2. UN proper shippin	g name			
TRIETHYLENETETRAMIN E	TRIETHYLENETETRAMIN E	Triethylenetetramine	TRIETHYLENETETRAMIN E	TRIETHYLENETETRAMIN E
Transport document descr	iption			
UN 2259 TRIETHYLENETETRAMIN E, 8, II, (E)	UN 2259 TRIETHYLENETETRAMIN E, 8, II	UN 2259 Triethylenetetramine, 8, II	UN 2259 TRIETHYLENETETRAMIN E, 8, II	UN 2259 TRIETHYLENETETRAMIN E, 8, II
14.3. Transport hazard o	class(es)			
8	8	8	8	8
8	B	B	B	B
14.4. Packing group				
II	II	II	II	II
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information	n available			
14.6. Special precaution	s for user			
Overland transport Classification code (ADR) Limited quantities (ADR)	: C7 : 11			

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

according to the REACH Regulation (EC) 1907/2006 amend	
Executed quantities (ADP)	: E2
Excepted quantities (ADR)	
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	
Portable tank and bulk container special provisions	: TP2
(ADR)	
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Hazard identification number (Kemler No.)	: 80
Orange plates	00
	80
	2250
	2259
Tuppel restriction code (ADD)	
Tunnel restriction code (ADR)	: E
The second buy and	
Transport by sea	
Limited quantities (IMDG)	: 1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Segregation (IMDG)	: SGG18, SG35
Properties and observations (IMDG)	: Moderately viscous, yellow combustible liquid with an ammoniacal odour. Miscible with
	water. Strongly alkaline. Can form explosive mixtures with nitric acid. When involved in a
	fire, evolves toxic gases. Corrosive to copper and copper alloys. Reacts violently with
	acids. Liquid and vapours cause burns to skin, eyes and mucous membranes. Causes skin
	allergy.
Air transport	
Air transport	· F2
PCA Excepted quantities (IATA)	: E2 · X840
PCA Excepted quantities (IATA) PCA Limited quantities (IATA)	: Y840
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA)	: Y840 : 0.5L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA)	: Y840 : 0.5L : 851
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA)	: Y840 : 0.5L : 851 : 1L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA)	: Y840 : 0.5L : 851 : 1L : 855
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA)	: Y840 : 0.5L : 851 : 1L : 855 : 30L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA)	: Y840 : 0.5L : 851 : 1L : 855
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA)	: Y840 : 0.5L : 851 : 1L : 855 : 30L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA)	: Y840 : 0.5L : 851 : 1L : 855 : 30L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA)	: Y840 : 0.5L : 851 : 1L : 855 : 30L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN)	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN)	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN)	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L : E2
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN)	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L : E2 : PP, EP
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN)	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L : E2
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN)	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L : E2 : PP, EP
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport	: Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L : E2 : PP, EP : 0
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 : C7
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID)	 : Y840 : 0.5L : 851 : 1L : 855 : 30L : 8L : C7 : 1L : E2 : PP, EP : 0 : C7 : 1L
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 O C7 1L E2 1L E2 C7 11 E2 E1 C7 11 E2 E2 C7 E2 E2 E2 E2 E2 E2 E2 E2 E2 E2 E3 E2
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Rumber of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 PP, EP 0 For a state of the state of t
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 PP, EP 0 P15
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 PP, EP 0 P15 T7
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 PP, EP 0 P15
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 PP, EP 0 P15 T7
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions (RID) Tank codes for RID tanks (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 P0.1, IBC02 MP15 T7 TP2 L4BN
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) ERG code (IATA) Inland waterway transport Classification code (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Number of blue cones/lights (ADN) Rail transport Classification code (RID) Limited quantities (RID) Excepted quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions (RID)	 Y840 0.5L 851 1L 855 30L 8L C7 1L E2 PP, EP 0 C7 1L E2 P0.1, IBC02 MP15 T7 TP2

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Colis express (express parcels) (RID)	:	CE6
Hazard identification number (RID)	:	80

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Germany

Employment restrictions	 Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
Storage class (LGK, TRGS 510)	: LGK 8A - Combustible corrosive substances.
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acr	onyms:
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
H302	Harmful if swallowed.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:		
H312	Harmful in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H317	May cause an allergic skin reaction.	
H332	Harmful if inhaled.	
H412	Harmful to aquatic life with long lasting effects.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Sens. 1	Skin sensitisation, Category 1	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.