

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 |

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| 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. | |

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| 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. |

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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

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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

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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 |

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| 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

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| 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 | | | |

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| 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 |
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| 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 |
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| 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 |

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| 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. |

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| 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.