# Phenol

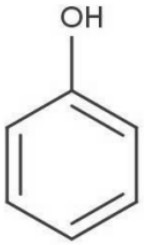
## Safety Data Sheet

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

Reference number: SDS-13525-1
Issue date: 5/13/2025 Version: 1.0
Doc No: SDS-959.046/0

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Substance |
| Substance name | : | Phenol |
| EC Index-No. | : | 604-001-00-2 |
| EC-No. | : | 203-632-7 |
| CAS-No. | : | 108-95-2 |
| Type of product | : | Pure substance,Hygroscopic substance. Preventive measures apply to the substance in dry state only |
| Formula (Override) | : | $C_6H_6O$ |
| Chemical structure | : |  |



| | | |
|---|---|---|
| Other means of identification | : | benzaphenol, solid / benzene phenol, solid / benzenol, solid / benzophenol, solid / carbolic acid / carbolic acid, crystals / carbolic acid, solid / cresote, solid / hydroxybenzene, solid / monohydroxybenzene / monophenol, solid / oxybenzene, solid / phenic acid, solid / phenic alcohol, solid / phenol / phenol alcohol, solid / phenol usp, crystals / phenol usp, solid / phenol, crystal / phenol, loose crystals / phenol, pure / Phenol, solid / phenyl alcohol, solid / phenyl hydrate, solid / phenyl hydroxide, solid / phenylalcohol / phenylic acid, solid / phenylic alcohol, solid |

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

#### 1.2.1. Relevant identified uses

| | | |
|---|---|---|
| Main use category | : | Industrial use,Professional use |
| Use of the substance/mixture | : | Disinfectant, Solvent, Laboratory chemicals |

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

**Supplier**
ISOLAB GmbH
Bahnhofstrasse 10, D-97877
Wertheim Germany
T +49 93 42 912 355 - F +49 93 42 912 357
prodsafe@isolab.de

### 1.4. Emergency telephone number

No additional information available

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

| | |
|---|---|
| Acute toxicity (oral), Category 3 | H301 |
| Acute toxicity (dermal), Category 3 | H311 |
| Acute toxicity (inhalation:dust,mist) Category 3 | H331 |
| Skin corrosion/irritation, Category 1, Sub-Category 1B | H314 |

Germ cell mutagenicity, Category 2 H341
Specific target organ toxicity – Repeated exposure, Category 2 H373
Full text of H- and EUH-statements: see section 16

**Adverse physicochemical, human health and environmental effects**

Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. Toxic in contact with skin. Toxic if inhaled. Toxic if swallowed. Causes severe skin burns and eye damage.

### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :

GHS05 GHS06 GHS08

Signal word (CLP) : Danger

Hazard statements (CLP) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
H314 - Causes severe skin burns and eye damage.
H341 - Suspected of causing genetic defects.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 - IF exposed or concerned: Call a POISON CENTER, doctor.

### 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : Phenol
CAS-No. : 108-95-2
EC-No. : 203-632-7
EC Index-No. : 604-001-00-2

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Phenol | CAS-No.: 108-95-2<br>EC-No.: 203-632-7<br>EC Index-No.: 604-001-00-2 | 100 | Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight)<br>Acute Tox. 3 (Dermal), H311 (ATE=300 mg/kg bodyweight)<br>Acute Tox. 3 (Inhalation), H331 (ATE=0.5 mg/l/4h)<br>Skin Corr. 1B, H314<br>Muta. 2, H341<br>STOT RE 2, H373 |

| Specific concentration limits: | | |
|---|---|---|
| **Name** | **Product identifier** | **Specific concentration limits (%)** |
| Phenol | CAS-No.: 108-95-2<br>EC-No.: 203-632-7<br>EC Index-No.: 604-001-00-2 | (1 ≤ C < 3) Skin Irrit. 2; H315<br>(1 ≤ C < 3) Eye Irrit. 2; H319<br>(3 ≤ C ≤ 100) Skin Corr. 1B; H314 |

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

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention. Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a doctor.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Toxic if swallowed. Burns.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Contact with combustible material may cause fire.

Explosion hazard : Risk of explosion if heated under confinement.

Hazardous decomposition products in case of fire : On heating or during combustion : Toxic fumes may be released.

### 5.3. Advice for firefighters

Precautionary measures fire : Keep away from combustible materials. Keep container closed when not in use. Approach from upwind.

Firefighting instructions : Exercise caution when fighting any chemical fire. Keep upwind. Do not enter fire area without proper protective equipment, including respiratory protection. Eliminate all ignition sources if safe to do so. Contain the extinguishing fluids by bunding.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information : Do not allow run-off from fire fighting to enter drains or water courses. Notify authorities if product enters sewers or public waters. High temperature decomposition products are harmful by inhalation. Inhalation of vapour can cause breathing difficulties.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Keep public away from danger area.

#### 6.1.1. For non-emergency personnel

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate spillage area. Do not touch or walk on the spilled product. Notify fire brigade and environmental authorities. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing.

Measures in case of dust release : In case of excessive dust production. Dust mask. Protective goggles. Dustproof clothing.

#### 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".

Emergency procedures : Evacuate unnecessary personnel. Equip cleanup crew with proper protection. Stop leak if safe to do so. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Do not touch or walk on the spilled product.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Incompatible products : Strong acids. Strong bases. Strong oxidizing agents.

Incompatible materials : Extremely high or low temperatures.

Heat and ignition sources : Keep away from heat and direct sunlight. Keep away from sources of ignition.

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Storage area : Store, if possible, in a cool, well ventilated place away from incompatible materials.

**Germany**

Storage class (LGK, TRGS 510) : LGK 6.1B - Non-combustible substances of acute toxicity, categories 1 and 2 / very toxic substances

Joint storage table :

| | | | | |
|---|---|---|---|---|
| LGK 1 | LGK 2A | LGK 2B | LGK 3 | LGK 4.1A |
| LGK 4.1B | LGK 4.2 | LGK 4.3 | LGK 5.1A | LGK 5.1B |
| LGK 5.1C | LGK 5.2 | LGK 6.1A | LGK 6.1B | LGK 6.1C |
| LGK 6.1D | LGK 6.2 | LGK 7 | LGK 8A | LGK 8B |
| LGK 10 | LGK 11 | LGK 12 | LGK 13 | LGK 10-13 |

Joint storage not permitted for : LGK 1, LGK 2A, LGK 3, LGK 4.1A, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1C, LGK 5.2, LGK 6.2, LGK 7

Joint storage with restrictions permitted for : LGK 5.1B, LGK 11, LGK 10-13

Joint storage permitted for : LGK 2B, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 12, LGK 13

### 7.3. Specific end use(s)

See Section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

| **Phenol (108-95-2)** | |
|---|---|
| **EU - Indicative Occupational Exposure Limit (IOEL)** | |
| Local name | Phenol |
| IOEL TWA | 8 mg/m³ |
| | 2 ppm |
| IOEL STEL | 16 mg/m³ |
| | 4 ppm |
| Remark | Skin |
| Regulatory reference | COMMISSION DIRECTIVE 2009/161/EU |
| **EU - Biological Limit Value (BLV)** | |
| Local name | Phenol |
| BLV | 120 mg/g creatinine Parameter: phenol - Medium: urine |
| Regulatory reference | SCOEL List of recommended health-based BLVs and BGVs |

#### 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

| **Phenol (108-95-2)** | |
|---|---|
| **DNEL/DMEL (Workers)** | |
| Acute - local effects, inhalation | 16 mg/m³ |
| Long-term - systemic effects, dermal | 1.23 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 8 mg/m³ |
| **DNEL/DMEL (General population)** | |
| Long-term - systemic effects,oral | 0.5 mg/kg bodyweight/day |

| Phenol (108-95-2) | |
|---|---|
| Long-term - systemic effects, inhalation | 0.452 mg/m³ |
| Long-term - systemic effects, dermal | 0.5 mg/kg bodyweight/day |
| **PNEC (Water)** | |
| PNEC aqua (freshwater) | 0.0077 mg/l |
| PNEC aqua (marine water) | 0.00077 mg/l |
| PNEC aqua (intermittent, freshwater) | 0.031 mg/l |
| **PNEC (Sediment)** | |
| PNEC sediment (freshwater) | 0.0915 mg/kg dwt |
| PNEC sediment (marine water) | 0.00915 mg/kg dwt |
| **PNEC (Soil)** | |
| PNEC soil | 0.136 mg/kg dwt |
| **PNEC (STP)** | |
| PNEC sewage treatment plant | 2.1 mg/l |

#### 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:**
Gloves. Safety glasses. Wear protective clothing. Wear foot protection. Gas mask.

**Personal protective equipment symbol(s):**

#### 8.2.2.1. Eye and face protection

**Eye protection:**
Safety glasses. Use splash goggles when eye contact due to splashing is possible

#### 8.2.2.2. Skin protection

**Skin and body protection:**
According to the conditions of use, protective gloves, apron, boots, head and face protection must be worn

**Hand protection:**
Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. The breakthrough time of the selected gloves must be greater than the intended use period. Gloves must be replaced after each use and whenever signs of wear or perforation appear

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
In case of insufficient ventilation, wear suitable respiratory equipment. [In case of inadequate ventilation] wear respiratory protection.

#### 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 properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Solid |
| Colour | : | Pure substance: colourless to white. On exposure to air: rose to brown. Unpurified: rose to brown. |
| Appearance | : | Crystalline solid. Needles. |
| Molecular mass | : | 94.11 g/mol |
| Odour | : | Sweet odour. Aromatic odour. Irritating/pungent odour. |
| Odour threshold | : | Not available |
| Melting point | : | 41 °C (1013 hPa) |
| Freezing point | : | 41 °C |
| Boiling point | : | 182 °C (1013 hPa) |
| Flammability | : | Not available |
| Explosive properties | : | Not classified. |
| Lower explosion limit | : | 1.3 vol % |
| Upper explosion limit | : | 9.5 vol % |
| Flash point | : | 81 °C (Closed cup, 1013 hPa) |
| Auto-ignition temperature | : | 715 °C (1013 hPa, T1) |
| Decomposition temperature | : | 800 °C |
| pH | : | No data available in the literature |
| pH solution | : | Not available |
| Viscosity, kinematic | : | No data available in the literature |
| Viscosity, dynamic | : | 3.437 mPa·s (50 °C) |
| Solubility | : | Moderately soluble in water. Soluble in ethanol. Soluble in methanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in tetrachloromethane. Soluble in acetic acid. Soluble in carbondisulfide. Soluble in sodium hydroxide solution. Soluble in glycerol. Soluble in acids. Soluble in halogenated hydrocarbons. Soluble in dimethyl sulfoxide. Soluble in dimethylformamide. Soluble in oils/fats.<br>Water: 8.4 g/100ml (20 °C)<br>Ethanol: soluble<br>Acetone: complete |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Partition coefficient n-octanol/water (Log Pow) | : | 1.5 (Experimental value, Equivalent or similar to OECD 117, 30 °C) |
| Vapour pressure | : | 0.2 hPa (20 °C) |
| Vapour pressure at 50°C | : | 3.3 hPa (Antoine equation) |
| Critical pressure | : | 61286 hPa |
| Saturation concentration | : | 0.77 g/m³ |
| Density | : | 1070 kg/m³ (20 °C) |
| Relative density | : | 1.07 (20 °C) |
| Relative vapour density at 20°C | : | 3.2 (Calculated) |
| Relative density of saturated gas/air mixture | : | 1 |
| Particle size | : | No data available in the literature |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

| | | |
|---|---|---|
| Relative evaporation rate (butylacetate=1) | : | < 0.03 |
| VOC content | : | 100 % |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts on exposure to temperature rise with (some) metals. At very high temperature: decomposes: release of highly flammable gases/vapours (hydrogen). Upon combustion: CO and CO2 are formed. Decomposes slowly on exposure to air. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Violent to explosive reaction with many compounds e.g.: with (some) acids/bases.

### 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 defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Toxic if swallowed.
Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Toxic if inhaled.
Skin corrosion/irritation : Causes severe skin burns.
pH: No data available in the literature
Serious eye damage/irritation : Assumed to cause serious eye damage
pH: No data available in the literature
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Suspected of causing genetic defects.
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

| **Phenol (108-95-2)** | |
|---|---|
| LOAEL (dermal, rat/rabbit, 90 days) | 260 mg/kg bodyweight Animal: rabbit |
| NOAEL (dermal, rat/rabbit, 90 days) | 130 mg/kg bodyweight Animal: rabbit |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

| **Phenol (108-95-2)** | |
|---|---|
| Viscosity, kinematic | No data available in the literature |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

| **Phenol (108-95-2)** | |
|---|---|
| EC50 - Crustacea [1] | 3.1 mg/l Test organisms (species): Ceriodaphnia dubia |
| EC50 72h - Algae [1] | 180 mg/l Test organisms (species): Dunaliella tertiolecta |
| EC50 72h - Algae [2] | 217.6 mg/l Test organisms (species): Dunaliella tertiolecta |
| NOEC (chronic) | 0.16 mg/l Test organisms (species): Daphnia magna Duration: '16 d' |
| NOEC chronic fish | 0.077 mg/l Test organisms (species): other: Duration: '60 d' |

### 12.2. Persistence and degradability

| **Phenol (108-95-2)** | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

| **Phenol (108-95-2)** | |
|---|---|
| Persistence and degradability | Not rapidly degradable |

### 12.3. Bioaccumulative potential

| **Phenol (108-95-2)** | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 1.5 (Experimental value, Equivalent or similar to OECD 117, 30 °C) |

| **Phenol (108-95-2)** | |
|---|---|
| BCF - Fish [1] | 17.5 |
| Partition coefficient n-octanol/water (Log Pow) | 1.47 |

### 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

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Completely empty the packaging prior to decontamination. Recycle the material as far as possible. Comply with local regulations for disposal.
Ecological waste information : Avoid release to the environment.

European List of Waste (LoW, EC 2000/532) : 07 06 04* - other organic solvents, washing liquids and mother liquors

## SECTION 14: Transport information

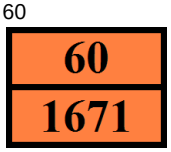
In accordance with ADR / IMDG / IATA / ADN / RID

| ADR | IMDG | IATA | ADN | RID |
|---|---|---|---|---|
| **14.1. UN number or ID number** | | | | |
| UN 1671 | UN 1671 | UN 1671 | UN 1671 | UN 1671 |
| **14.2. UN proper shipping name** | | | | |
| PHENOL, SOLID | PHENOL, SOLID | Phenol, solid | PHENOL, SOLID | PHENOL, SOLID |
| **Transport document description** | | | | |
| UN 1671 PHENOL, SOLID, 6.1, II, (D/E) | UN 1671 PHENOL, SOLID, 6.1, II | UN 1671 Phenol, solid, 6.1, II | UN 1671 PHENOL, SOLID, 6.1, II | UN 1671 PHENOL, SOLID, 6.1, II |
| **14.3. Transport hazard class(es)** | | | | |
| 6.1 | 6.1 | 6.1 | 6.1 | 6.1 |
|  |  |  |  |  |
| **14.4. Packing group** | | | | |
| II | II | II | II | II |
| **14.5. Environmental hazards** | | | | |
| Dangerous for the environment: No | Dangerous for the environment: No<br>Marine pollutant: No | Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No |
| No supplementary information available | | | | |

### 14.6. Special precautions for user

**Overland transport**

Classification code (ADR) : T2
Special provisions (ADR) : 279
Limited quantities (ADR) : 500g
Excepted quantities (ADR) : E4
Packing instructions (ADR) : P002, IBC08
Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : MP10
Portable tank and bulk container instructions (ADR) : T3
Portable tank and bulk container special provisions (ADR) : TP33
Tank code (ADR) : SGAH
Tank special provisions (ADR) : TU15, TE19
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages (ADR) : V11
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
Special provisions for carriage - Operation (ADR) : S9, S19
Hazard identification number (Kemler No.) : 60
Orange plates :



| | | |
|---|---|---|
| Tunnel restriction code (ADR) | : | D/E |

**Transport by sea**

| | | |
|---|---|---|
| Special provisions (IMDG) | : | 279 |
| Limited quantities (IMDG) | : | 500 g |
| Excepted quantities (IMDG) | : | E4 |
| Packing instructions (IMDG) | : | P002 |
| IBC packing instructions (IMDG) | : | IBC08 |
| IBC special provisions (IMDG) | : | B21, B4 |
| Tank instructions (IMDG) | : | T3 |
| Tank special provisions (IMDG) | : | TP33 |
| EmS-No. (Fire) | : | F-A |
| EmS-No. (Spillage) | : | S-A |
| Stowage category (IMDG) | : | A |
| Properties and observations (IMDG) | : | Colourless or white crystals or crystallized mass. Melting point: 43°C (pure product). Soluble in water. Toxic if swallowed, by skin contact or by vapour inhalation. Rapidly absorbed through the skin. |

**Air transport**

| | | |
|---|---|---|
| PCA Excepted quantities (IATA) | : | E4 |
| PCA Limited quantities (IATA) | : | Y644 |
| PCA limited quantity max net quantity (IATA) | : | 1kg |
| PCA packing instructions (IATA) | : | 669 |
| PCA max net quantity (IATA) | : | 25kg |
| CAO packing instructions (IATA) | : | 676 |
| CAO max net quantity (IATA) | : | 100kg |
| Special provisions (IATA) | : | A113 |
| ERG code (IATA) | : | 6L |

**Inland waterway transport**

| | | |
|---|---|---|
| Classification code (ADN) | : | T2 |
| Special provisions (ADN) | : | 279, 802 |
| Limited quantities (ADN) | : | 500 g |
| Excepted quantities (ADN) | : | E4 |
| Equipment required (ADN) | : | PP, EP |
| Number of blue cones/lights (ADN) | : | 2 |

**Rail transport**

| | | |
|---|---|---|
| Classification code (RID) | : | T2 |
| Special provisions (RID) | : | 279 |
| Limited quantities (RID) | : | 500g |
| Excepted quantities (RID) | : | E4 |
| Packing instructions (RID) | : | P002, IBC08 |
| Special packing provisions (RID) | : | B4 |
| Mixed packing provisions (RID) | : | MP10 |
| Portable tank and bulk container instructions (RID) | : | T3 |
| Portable tank and bulk container special provisions (RID) | : | TP33 |
| Tank codes for RID tanks (RID) | : | SGAH |
| Special provisions for RID tanks (RID) | : | TU15 |
| Transport category (RID) | : | 2 |
| Special provisions for carriage – Packages (RID) | : | W11 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : | CW13, CW28, CW31 |
| Colis express (express parcels) (RID) | : | CE9 |
| Hazard identification number (RID) | : | 60 |

## 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)**

Not listed on REACH Annex XVII

**REACH Annex XIV (Authorisation List)**

Not listed on REACH Annex XIV (Authorisation List)

**REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

**PIC Regulation (Prior Informed Consent)**

Not listed on the PIC list (Regulation EU 649/2012)

**POP Regulation (Persistent Organic Pollutants)**

Not listed on the POP list (Regulation EU 2019/1021)

**Ozone Regulation (1005/2009)**

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

**Council Regulation (EC) for the control of dual-use items**

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

**VOC Directive (2004/42)**

VOC content : 100 %

**Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

**Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 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 2, Significantly hazardous to water (Classification according to AwSV; ID No. 170).

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).

Major Accidents Ordinance (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| **Abbreviations and acronyms:** | |
|---|---|
| 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 |
| BCF | Bioconcentration factor |

| **Abbreviations and acronyms:** | |
|---|---|
| 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 |
| IATA | 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 |
| PBT | 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 |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| IOELV | Indicative Occupational Exposure Limit Value |
| Pow (log) | n-octanol/water partition coefficient |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| WGK | Water Hazard Class |

Data sources : Classification according to Regulation (EC) No. 1272/2008 [CLP]. ECHA (European Chemicals Agency). Supplier's safety documents.

| **Full text of H- and EUH-statements:** | |
|---|---|
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal), Category 3 |
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), Category 3 |
| Acute Tox. 3 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Muta. 2 | Germ cell mutagenicity, Category 2 |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT RE 2 | Specific target organ toxicity – Repeated exposure, Category 2 |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

The classification complies with : ATP 12

SDS EN INTERLAB

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable