

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 31 Aug 2023

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Trichloroethene

### 1.1. Catalog No.:

677439

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Germ cell mutagenicity (Category 2), H341 Carcinogenicity (Category 1B), H350 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336 Chronic aquatic toxicity (Category 3), H412

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal word Danger Hazard statement(s) H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H341 Suspected of causing genetic defects. H350 May cause cancer. H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) P201 Obtain special instructions before use. P261 Avoid breathing vapours. P273 Avoid release to the environment. P281 Use personal protective equipment as required. 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 + P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard Statements none

Restricted to professional users. 2.3 Other hazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Synonyms : TCETrichloroethene Formula : C<sub>2</sub>HCl<sub>3</sub> Molecular weight : 131,39 g/mol CAS-No. : 79-01-6  
EC-No. : 201-167-4 Index-No. : 602-027-00-9

Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration  
Trichloroethylene Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) CAS-No. EC-No. Index-No.

79-01-6 201-167-4 602-027-00-9

Skin Irrit. 2; Eye Irrit. 2; Muta. 2; Carc. 1B; STOT SE 3; Aquatic Chronic 3; H315, H319, H341, H350, H336, H412  
Concentration limits: >= 20 %: STOT SE 3, H336; <= 100 %

#### 3.1.1. Formula

C<sub>2</sub>HCl<sub>3</sub>

#### 3.1.2. Molecular Weight (g/mol)

131.39

#### 3.1.3. CAS-No.

79-01-6

#### 4. FIRST AID MEASURES

4.1 Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

#### 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. 5.2 Special hazards arising from the substance or mixture No data available 5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary. 5.4 Further information No data available

#### 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8. 6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. 6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. 6.4 Reference to other sections For disposal see section 13

#### 7. HANDLING AND STORAGE

7.1 Precautions for safe handling Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Light sensitive. Handle and store under inert gas. 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: liquid, clear Colour: colourless b) Odour No data available c) Odour Threshold No data available d) pH No data available e) Melting point/freezing point Melting point/range: -84,8 °C - lit. f) Initial boiling point and boiling range 86,7 °C - lit. g) Flash point No data available h) Evaporation rate No data available i) Flammability (solid, gas) No data available j) Upper/lower flammability or explosive limits Upper explosion limit: 10,5 %(V) Lower explosion limit: 8 %(V) k) Vapour pressure 81,3 hPa at 20,0 °C l) Vapour density No data available m) Relative density 1,463 g/mL at 25 °C n) Water solubility No data available o) Partition coefficient: noctanol/water log Pow: 2,29 log Pow: 5 p) Auto-ignition temperature 410,0 °C q) Decomposition temperature No data available r) Viscosity No data available s) Explosive properties No data available t) Oxidizing properties No data available 9.2 Other safety information No data available

## 10. STABILITY AND REACTIVITY

10.1 Reactivity No data available 10.2 Chemical stability Stable under recommended storage conditions. 10.3 Possibility of hazardous reactions No data available 10.4 Conditions to avoid No data available 10.5 Incompatible materials Oxidizing agents, Strong bases, Magnesium 10.6 Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas Other decomposition products - No data available In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity LD50 Oral - Rat - 4.920 mg/kg  
LC50 Inhalation - Mouse - 4 h - 8450 ppm  
LD50 Dermal - Rabbit - > 20.000 mg/kg  
Skin corrosion/irritation Skin - Rabbit Result: Severe skin irritation - 24 h  
Serious eye damage/eye irritation Eyes - Rabbit Result: Eye irritation - 24 h  
Respiratory or skin sensitisation No data available Germ cell mutagenicity Laboratory experiments have shown mutagenic effects. In vitro tests showed mutagenic effects  
Carcinogenicity This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Possible human carcinogen IARC: 1 - Group 1: Carcinogenic to humans (Trichloroethylene) Reproductive toxicity No data available No data available Specific target organ toxicity - single exposure No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available Additional Information RTECS: KX4550000  
burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Exposure to and/or consumption of alcohol may increase toxic effects., Gastrointestinal disturbance, Kidney injury may occur., narcosis To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 41 mg/l - 96,0 h  
LOEC - other fish - 11 mg/l - 10,0 d NOEC - Oryzias latipes - 40 mg/l - 10,0 d  
Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 18,00 mg/l - 48 h  
Toxicity to algae IC50 - Pseudokirchneriella subcapitata (green algae) - 175,00 mg/l - 96 h 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential Does not bioaccumulate. 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Other adverse effects Harmful to aquatic life with long lasting effects.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product.

### 14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 1710 IMDG: 1710 IATA: 1710 14.2 UN proper shipping name ADR/RID: TRICHLOROETHYLENE IMDG: TRICHLOROETHYLENE IATA: Trichloroethylene 14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group ADR/RID: III IMDG: III IATA: III 14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6 Special precautions for user No data available

### 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Authorisations and/or restrictions on use REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Trichloroethylene REACH - Candidate List of Substances of Very High : Trichloroethylene Concern for Authorisation (Article 59). This product contains a substance listed on Annex XIV of the REACH Regulation (EC) Nr. 1907/2006. Listed substance / Sunset Date: Trichloroethylene / 21.04.2016

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

15.2 Chemical safety assessment For this product a chemical safety assessment was not carried out

### 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!