

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 12 Oct 2023

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

1.1. Product name:

2,3,5,6-Tetrachlorophenol

1.1. Catalog No.:

681465

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

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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 Flammable liquids (Category 2), H225 Skin irritation (Category 2), H315 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336 Aspiration hazard (Category 1), H304 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

2.2. Label elements

2.2.1. Pictogram



2.2.2. Signal

Signal word Danger



Hazard statement(s)

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s) P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

- P261 Avoid breathing vapours.
- P273 Avoid release to the environment. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

physician. P331 Do NOT induce vomiting. P501 Dispose of contents/ container to an approved waste disposal plant. Supplemental Hazard

Statements

none

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Formula : C6H12 Molecular Weight : 84,16 g/mol CAS-No. : 110-82-7 EC-No. : 203-806-2 Index-No.: 601-017-00-1 Registration number: 01-2119463273-41-XXXX Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration Cyclohexane CAS-No. EC-No. Index-No. 110-82-7 203-806-2 203-806-2 601-017-00-1 Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H225, H304, H315, H336, H410 - 100 % <= 100 % <= 100 % Hazardous ingredients according to Directive 1999/45/EC Component Classification Concentration Cyclohexane CAS-No. EC-No. Index-No. 110-82-7 203-806-2 601-017-00-1 601-017-00-1 F, Xn, N, R11 - R20 - R38 -R65 - R67 - R50/53 <= 100 %

3.1.1. Formula C6H2CI4O



3.1.2. Molecular Weight (g/mol)

231.89

3.1.3. CAS-No.

935-95-5

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

Do NOT induce vomiting. 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 Carbon oxides 5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary. 5.4 Further information Use water spray to cool unopened containers.



6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.

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.

Store under inert gas. 7.3 Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and Tandle in accordance with good industrial hygiene and safety practice. Wash hands before be at the end of workday. Personal protective equipment Eye/face protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of without touching glove's outer surface with applicable laws and good laboratory practices. contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: liquid 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: 4 - 7 °C - lit. f) Initial boiling point and 1) Initial boining point and boiling range
80,7 °C - lit.
2) Flash point -18,0 °C - closed cup
h) Evapouration rate no data available
i) Flammability (solid, gas) no data available i) Flammability (solid, gas) no data availab
j) Upper/lower
flammability or
explosive limits
Upper explosion limit: 9 %(V)
Lower explosion limit: 1 %(V)
k) Vapour pressure 225,0 hPa at 37,7 °C
102,7 hPa at 20,0 °C
l) Vapour density no data available
m) Relative density 0,779 g/cm3 at 25 °C
n) Water solubility no data available
o) Partition coefficient: noctanol/ water water log Pow: 3,44 p) Auto-ignition temperature 260,0 °C q) Decomposition témperature 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
Heat, flames and sparks. Extremes of temperature and direct sunlight.
10.5 Incompatible materials
Strong oxidizing agents
10.6 Hazardous decomposition products
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 - 12.705 mg/kg LC50 Inhalation - rat - 4 h - 34.000 mg/l (OECD Test Guideline 403) LD50 Dermal - rabbit - > 2.000 mg/kg Skin corrosion/irritation Skin - rabbit Result: No skin irritation Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Serious eye damage/eye irritation Eyes - rabbit Result: Mild eye irritation Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available no data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity no data available Specific target organ toxicity - single exposure May cause drowsiness or dizziness. Specific target organ toxicity - repeated exposure no data available no data available Aspiration hazard May be fatal if swallowed and enters airways. Additional Information RTECS: GU6300000 Central nervous system depression, Drowsiness, Irritability, Dizziness, Gastrointestinal disturbance, Lung irritation, chest pain, pulmonary edema

12. ECOLOGICAL INFORMATION

12.1 Toxicity no data available 12.2 Persistence and degradability no data available 12.3 Bioaccumulative potential no data available 12.4 Mobility in soil no data available 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted 12.6 Other adverse effects Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Product Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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: 1145 IMDG: 1145 IATA: 1145 14.2 UN proper shipping name ADR/RID: CYCLOHEXANE, SOLUTION IMDG: CYCLOHEXANE, SOLUTION IATA: Cyclohexane, SOLUTION 14.3 Transport hazard class(es) ADR/RID: 3 IMDG: 3 IATA: 3 14.4 Packaging group ADR/RID: 11 IMDG: 11 IATA: 11 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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available 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!