

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 16 Jan 2025

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

1.1. Product name:

Mancozeb (Technical Mixture)

1.1. Catalog No.:

672865

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 [EU-GHS/CLP] Reproductive toxicity (Category 2) Skin sensitization (Category 1) Acute aquatic toxicity (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Very toxic to aquatic organisms. May cause sensitization by skin contact. Possible risk of harm to the unborn child

2.2. Label elements

2.2.1. Pictogram





2.2 Label elements



Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Warning Hazard statement(s) H317 May cause an allergic skin reaction. H361d Suspected of damaging the unborn child. H400 Very toxic to aquatic life. Precautionary statement(s) P273 Avoid release to the environment. P280 Wear protective gloves. Supplemental Hazard Statements None According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R43 May cause sensitization by skin contact. R63 Possible risk of harm to the unborn child. R50 Very toxic to aquatic organisms. S-phrase(s) S36/37 Wear suitable protective clothing and gloves. S46 If swallowed, seek medical advice immediately and show this container or label. S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets. 2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Component Concentration Mancozeb CAS-No. Index-No. 8018-01-7 006-076-00-1

3.1.1. Formula

3.1.2. Molecular Weight (g/mol)

0.00



3.1.3. CAS-No.

8018-01-7

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 breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact Flush eyes with water as a precaution.

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

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 Nature of decomposition products not known. Nature of decomposition products not known. Nature of decomposition products not known. 5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting 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 dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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 7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C 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 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 contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry Hands Body Protection

Complete suit protecting against chemicals, 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 particle respirator type N100 (US) or type P3 (EN 143) 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: solid Colour: light grey b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing point no data available f) Initial boiling point and boiling range no data available g) Flash point 138 °C
 h) Evaporation rate no data available Flammability (solid, gas) no data available j) Upper/lower flammability or explosive limits no data available k) Vapour pressure no data available
 l) Vapour density no data available
 m) Relative density no data available



n) Water solubility insoluble o) Partition coefficient: noctanol/ water log Pow: 1,33 p) Autoignition temperature no data available 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 no data available 10.3 Possibility of hazardous reactions no data available 10.4 Conditions to avoid no data available 10.5 Incompatible materials Strong oxidizing agents 10.6 Hazardous decomposition products Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity LD50 Oral - rat - 5.000 mg/kg Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization May cause allergic skin reaction. Germ cell mutagenicity Genotoxicity in vitro - Human - fibroblast Unscheduled DNA synthesis Genotoxicity in vitro - Human - lymphocyte Cytogenetic analysis Genotoxicity in vivo - rat - Oral Cytogenetic analysis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Unscheduled DNA synthesis Genotoxicity in vivo - mouse - Skin Tumorigenicity - mouse - Skin Carcinogenicity - mouse - Skin Tumorigenicity - mouse - Skin Carcinogenicity - mouse - Skin Tumorigenicity - mouse - Sk

Suspected human reproductive toxicant



Reproductive toxicity - rat - Unreported Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Developmental Toxicity - rat - Oral Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Eye, ear. Developmental Toxicity - rat - Oral Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Homeostasis Specific target organ toxicity - single exposure May cause respiratory irritation. Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Potential health effects Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Additional Information RTECS: ZB3200000

12. ECOLOGICAL INFORMATION

12.1 Toxicity Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 1,1 mg/l - 96,0 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0,6 - 1,0 mg/l - 48 h Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 0,05 mg/l - 5 d 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 no data available 12.6 Other adverse effects Very toxic to aquatic life. Avoid release to the environment

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product



14. TRANSPORT INFORMATION

14.1 UN number ADR/RID: 3077 IMDG: 3077 IATA: 3077 14.2 UN proper shipping name ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb) IATA: Environmentally hazardous substance, solid, n.o.s. (Mancozeb) 14.3 Transport hazard class(es) ADR/RID: 9 IMDG: 9 IATA: 9 14.4 Packaging group ADR/RID: 11 IMDG: 111 IATA: 111 14.5 Environmental hazards ADR/RID: yes IMDG Marine pollutant: yes IATA: yes 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 no data available

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!