

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 18 Feb 2025

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

1.1. Product name:

Naled

1.1. Catalog No.:

675897

1.2. Relevant identified uses of the substance or mixture Identified: Laboratory chemical uses: R&D

uses:

1.3. Uses advised against:

HPC Standards GmbH Am Wieseneck 7

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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 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Acute aquatic toxicity (Category 1), H400 Classification according to EU Directives 67/548/EEC or 1999/45/EC T Toxic R21, R25 R36/38 N Dangerous for the 2.1 Classification of the substance or mixture N Dangerous for the environment R50

2.2. Label elements

2.2.1. Pictogram





Signal word Danger Hazard statement(s) H301 Toxic if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. Precautionary statement(s) P273 Avoid release to the environment. P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/ physician if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. P391 Collect spillage. Supplemental Hazard Statements none 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 Formula : C4H7Br2Cl2O4P Molecular weight : 380,78 g/mol CAS-No. : 300-76-5 EC-No. : 206-098-3 Index-No. : 015-055-00-6 Hazardous ingredients according to Regulation (EC) No 1272/2008 Component Classification Concentration Naled CAS-No. EC-No. Index-No. 300-76-5 206-098-3 015-055-00-6 Acute Tox. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Aquatic Acute 1; H301, H312, H315, H319, H400 <= 100 % Hazardous ingredients according to Directive 1999/45/EC Component Classification Concentration Naled CAS-No. EC-No. Index-No. 300-76-5 206-098-3 015-055-00-6 T, N, R21 - R25 - R36/38 -R50 <= 100 %

2.2.2.



3.1.1. Formula

C4H7Br2Cl2O4P

3.1.2. Molecular Weight (g/mol)

380.78

3.1.3. CAS-No.

300-76-5

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. Take victim immediately to hospital. Consult a physician.

In case of eve 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
Carbon oxides, Oxides of phosphorus, Hydrogen chloride gas, Hydrogen bromide gas
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 Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

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

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 Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 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. Recommended storage temperature 2 - 8 °C Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects 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

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Every face 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 \$4039; souter 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 N99 (US) or type P2 (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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: solid Colour: colourless 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 110 °C at 0,33 hPa g) Flash point No data available h) Evaporation rate No data available i) Flammability (solid, gas) No data available j) Upper/lower No data available flammability or explosive limits k) Vapour pressure No data available l) Vapour density No data available m) Relative density 1,960 g/cm3 at 20 °C n) Water solubility insoluble o) Partition coefficient: noctanol/ water f) Initial boiling point and water No data available p) Auto-ignition témperature No data available q) Decomposition tëmperature 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
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 - 92 mg/kg Remarks: Behavioral:Tremor. Gastrointestinal:Changes in structure or function of salivary glands. Diarrhoea



LD50 Dermal - Rabbit - 1.100 mg/kg Skin corrosion/irritation Skin - Rabbit Result: Severe skin irritation Skin - Human Result: Open irritation test Serious eye damage/eye irritation No data available Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. 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 No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available Additional Information RTECS: TB9450000 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 - Oncorhynchus mykiss (rainbow trout) - 0,05 - 0,3 mg/l - 96,0 h mortality LOEC - Cynoscion nebulosus - 1,000 mg/l - 24,0 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0,002 mg/l - 48 h 12.2 Persistence and degradability Biodegradability Result: - Readily biodegradable Remarks: 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 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 Very toxic to aquatic life. Avoid release to the environment

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
 Product
 Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. 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: 2811 IMDG: 2811 IATA: 2811 14.2 UN proper shipping name ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Naled) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Naled) IATA: Toxic solid, organic, n.o.s. (Naled) 14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group ADR/RID: 1II IMDG: 1II IATA: 1II 14.5 Environmental hazards ADR/RID: yes IMDG Marine pollutant: yes 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!