

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

Sodium perchlorate monohydrate

1.1. Catalog No.:

676746

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]
Oxidizing solids (Category 1) Acute toxicity, Oral (Category 4) Classification according to EU Directives 67/548/EEC or
1999/45/EC Explosive when mixed with combustible material. Harmful if swallowed

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Danger
Hazard statement(s) H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed.
Precautionary statement(s) P220 Keep/Store away from clothing/ combustible materials.
Supplemental Hazard Statements none According to European Directive 67/548/EEC as amended. Hazard symbol(s)
R-phrases(s) R 9 Explosive when mixed with combustible material. R22 Harmful if swallowed.
S-phrase(s) S13 Keep away from food, drink and animal feedingstuffs. S22 Do not breathe dust. S27 Take off immediately

all contaminated clothing. 2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Formula : ClNa18O4 Molecular Weight : 130,44 g/mol
Component Concentration Sodium perchlorate-18O4 CAS-No. Index-No.
1173022-22-4 017-010-00-6

3.1.1. Formula

ClH2NaO5

3.1.2. Molecular Weight (g/mol)

140.46

3.1.3. CAS-No.

7791-07-3

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 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 Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. 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 Hydrogen chloride gas, Sodium 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. 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. 6.3 Methods and materials for containment and cleaning up Sweep up and shovel. 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). 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. Keep away from sources of ignition - No smoking. 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Store under inert gas. hygroscopic 7.3 Specific end uses no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Parameters to be monitored Components with workplace-related limit values to be monitored Does not contain any Substances with occupational exposure limits. 8.2 Exposure controls Appropriate technical Control devices The usual precautionary measures when handling chemicals must be observed. Before Wash hands during breaks and at the end of work. Personal protective equipment Eye/face protection Safety goggles with Side protection according to EN 166 Only use equipment for eye protection that has been tested and approved according to official standards such as NIOSH (US) or EN 166 (EU). Skin protection Work with gloves. Gloves must be examined before use. Use a suitable extraction method (without the outer touching glove surface) to avoid skin contact with this product. Disposal of the contaminated Gloves after use within the framework of legal regulations and good laboratory practice. washing and drying hands. Body protection Complete chemical protection suit, The type of protective equipment must vary depending on Concentration and amount of the hazardous substance at the workplace can be selected. Respiratory protection If after If air-purifying respiratory protection is required according to the risk assessment, a full-face mask with a particle filter of type N100 must be used (US) or type P3 (EN 143) can be used in addition to the technical measures. Is the respirator the The only protective measure is to use self-contained breathing apparatus with a full-face mask. respirators and Components must be tested and tested according to appropriate government standards such as NIOHS (US) or CEN (EU). be approved.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: solid Colour: white b) Odour no data available c) Odour Threshold no data available d) pH no data available e) Melting point/freezing point Melting point/range: 468 °C Melting point/range: 468 °C - lit. f) Initial boiling point and boiling range no data available 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 no data available k) Vapour pressure no data available l) Vapour density no data available m) Relative density no data available n) Water solubility no data available o) Partition coefficient: noctanol/water no data available 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 The substance or mixture is classified as oxidizing with the category 1. 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 no data available 10.6 Hazardous decomposition products Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation Respiratory or skin sensitization no data available Germ cell mutagenicity 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 Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion Harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Signs and Symptoms of Exposure Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Additional Information RTECS: Not available

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 no data available 12.6 Other adverse effects no data available

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: 1502 IMDG: 1502 IATA: 1502 14.2 UN proper shipping name ADR/RID: SODIUM PERCHLORATE IMDG: SODIUM PERCHLORATE IATA: Sodium perchlorate 14.3 Transport hazard class(es) ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1 14.4 Packaging group ADR/RID: II IMDG: II IATA: II 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 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!