



# SAFETY DATA SHEET

## 1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Catalogue No : S 17729

Product Name : **Sodium perborate tetrahydrate**

Manufacture / Supplier Identification Company : **Nice Chemicals (P) Ltd.,**  
PB No: 2217, Manimala Road,  
Edappally, Kochi - 682 024, Kerala, India.

Contact for Information : **Tel:** 91-484-2800212, 2802755, 2802536, 2801583  
**Fax :** 0484 2802483

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TeleFax No : 0484 2802483

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## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Synonyms : .....

CAS - No : .....

Molar Mass : .....

Molecular Weight : 153.86 g/mol

Molecular Formula :  $\text{BNaO}_3 \cdot 4\text{H}_2\text{O}$

EC - INDEX No : .....

EC - No : .....

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## 3 HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 : Oxidizing solids (Category 2), H272  
Oxidizing solids (Category 2), H272  
Acute toxicity, Oral (Category 4), H302  
Serious eye damage (Category 1), H318  
Reproductive toxicity (Category 1B), H360Df  
Specific target organ toxicity - single exposure  
(Category 3), Respiratory system, H335

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Contact with combustible material may cause fire. May cause harm to the unborn child. Possible risk of impaired fertility, Harmful if swallowed. Irritating to respiratory system. Risk of serious damage to eye

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**Label Elements**

Labelling according Regulation (EC) No 1272/2008

Pictogram : 

Signal word : Danger

**Hazard statement(s)**

H272 : May intensify fire; oxidiser.  
H302 : Harmful if swallowed.  
H318 : Causes serious eye damage.  
H335 : May cause respiratory irritation.  
H360Df : May damage the unborn child. Suspected of damaging fertility

**Precautionary statement(s)**

P201 : Obtain special instructions before use.  
P220 : Keep/Store away from clothing/ combustible materials.  
P261 : Avoid breathing dust  
P280 : Wear protective gloves/ eye protection/ face protection.  
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 : none  
Other Hazards : none

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**4 FIRST AID MEASURES**

General advice : Consult a physician. Show this safety data sheet to the doctor in attendance.  
After Inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

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After skin contact	: Wash off with soap and plenty of water. Consult a physician.
After eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
After swallowing	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most Important symptoms and effects, both acute and delayed	: The most important known symptoms and effects are described in the labelling
Indication of any immediate medical attention and special treatment needed	: no data available
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**5 FIRE - FIGHTING MEASURES**

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	: No data available
Advice for firefighters	: Wear self contained breathing apparatus for fire fighting if necessary.
Further Information	: Use water spray to cool unopened containers.
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**6 ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental-protection	: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
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.
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**7 HANDLING AND STORAGE**

Precautions for safe handling	: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition No smoking. Keep away from heat and sources of ignition.
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Conditions for safe storage, including any incompatibilities : Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end users : no data available

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### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameter : Components with workplace control parameters

#### 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. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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.

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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).

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.

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance : **Form** : crystalline  
**Colour** : White

Odour : No data available

Odour Threshold : No data available

pH : 10.0 - 10.4 at 10 g/l at 25 °C

Melting Point/Freezing point : Melting point/range: 60 °C - dec.

Initial Boiling point and boiling range : No data available

Flash Point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper/lower flammability or explosive limits : No data available

Vapour Pressure : No data available

Vapour Density : No data available

Relative density : No data available

Water solubility : No data available

Partition coefficient: noctanol/water : No data available

Autoignition temperature : No data available

Viscosity : No data available

Explosive properties : No data available

Oxidizing properties : The substance or mixture is classified as oxidizing with the category 2.

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Other Safety information : No data available

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## 10 STABILITY AND REACTIVITY

Reactivity : No data available

Chemical stability : Stable under recommended storage conditions.

Conditions to be avoided : No data available

Substance to be avoided : No data available

Hazardous decomposition products : Hazardous decomposition products formed under fire conditions. - Borane/boron oxides, Sodium oxides Other decomposition products - no data available

Possibility of hazardous reactions : No data available

incompatible materials : Metals, Metallic salts, acids, Bases, Reducing agents

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## 11 TOXICOLOGICAL INFORMATION

Acute Toxicity : LDLO Oral - Infant - 400 mg/kg  
LDLO Oral - Child - 250 mg/kg  
LDLO Oral - Human - 214 mg/kg  
LD50 Oral - rat - 1.200 mg/kg  
**Remarks:** Behavioral:Convulsions or effect on seizure threshold. Behavioral:Muscle weakness.  
LD50 Dermal - rabbit - > 2.000 mg/kg

### Further toxicological Information

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.

Skin corrosion test ( rabbit) : No skin irritation

Respiratory or skin Sensitization : No data available

Germ cell mutagenicity : No data available

After Inhalation : No data available

After Skin contact : No data available

After swallowing : No data available

After swallowing of large amounts : No data available

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Further data	: No data available
Reproductive toxicity - rat - Oral	
Reproductive toxicity	Maternal Effects: Other effects. Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). : Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord). Presumed human reproductive toxicant May damage the unborn child. Suspected of damaging fertility.
	<b>Developmental Toxicity - rat - Oral</b> Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). : <b>Developmental Toxicity - rat - Oral</b> Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Cardiovascular (circulatory) system.
Specific target organ toxicity-single exposure	: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
Specific target organ toxicity-repeated exposure	: No data available
Additional Information	: RTECS: SC7350000

## 12 ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish LC50 -	: Danio rerio (zebra fish) - 51 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 - Daphnia magna (Water flea) - 11 mg/l - 48 h
Toxicity to algae	: IC50 - Desmodesmus subspicatus (green algae) - 26.8 mg/l - 96 h
Persistence and degradability	: Biodegradability Biotic/Aerobic Result: 85 % - Readily biodegradable.
Bioaccumulative potential	: No data available
Mobility in soil	: No data available

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Results of PBT and vPvB assessment : PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects : Harmful to aquatic life.

### 13 DISPOSAL METHOD

#### 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

UN number : ADR/RID: - 1479 IMDG: -  
 : 1479  
 IATA: - 1479

UN Proper shipping name : ADR/RID: OXIDIZING SOLID, N.O.S. (Sodium peroxometaborate tetrahydrate)  
 : IMDG: OXIDIZING SOLID, N.O.S. (Sodium peroxometaborate tetrahydrate)  
 : IATA: Oxidizing solid, n.o.s. (Sodium peroxometaborate tetrahydrate)

Transport hazard class(es) : ADR/RID: - 5.1  
 : IMDG: - 5.1  
 : IATA: - 5.1

Packaging group : ADR/RID: - III  
 : IMDG: - III  
 : IATA: - III

Environmental group : ADR/RID: - no IMDGMarine  
 : pollutant: no IATA: -no

Special precaution for user : No data available

### 15 REGULATORY INFORMATION

This safety datasheet compiles with the requirements of Regulation (EC) No. 1907/2006

Safety, health and environmental regulations/legislation specific for the substance or mixture

Authorisations and/or restrictions on use : Sodium peroxometaborate tetrahydrate Candidate List of Substances of Very High Concern for Authorisation Toxic for reproduction (article 57c) ED/49/2014





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Chemical safety assessment	: For this product a chemical safety assessment was not carried out
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### 16 OTHER INFORMATION

The information contained here in is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precaution. It does not represent a guarantee of the properties of the product.