

# SAFETY DATA SHEET

Date Printed: 05/25/2024

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## SECTION 1. IDENTIFICATION

**Product Identifier:** Sodium Perborate Tetrahydrate

**Product Code:** NA-PBAT-01-C.4HYD

**CAS Number:** 10486-00-7

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Inhalation Toxicity - Dusts and Mists Category 4

Serious Eye Damage/Eye Irritation Category 1

Reproductive Toxicity Category 1B

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word: Danger

Hazard Statements:

Causes serious eye damage

Harmful if inhaled

May cause respiratory irritation

May damage the unborn child. Suspected of damaging fertility



Precautionary Statements

Prevention:

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Response:  
IF exposed or concerned: Get medical attention/advice  
Inhalation  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Eyes  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
Storage:  
Store locked up  
Store in a well-ventilated place. Keep container tightly closed  
Disposal:  
Dispose of contents/container to an approved waste disposal plant  
Hazards not otherwise classified (HNOC)  
None identified

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component CAS-No Weight %  
Sodium perborate tetrahydrate 10486-00-7 >95

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### **SECTION 4. FIRST AID MEASURES**

Eye Contact  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.  
Skin Contact  
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.  
Inhalation  
Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.  
Ingestion  
Do NOT induce vomiting. Get medical attention.  
Most important symptoms and effects  
Causes eye burns.  
Notes to Physician Treat symptomatically

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### **SECTION 5. FIREFIGHTING MEASURES**

Suitable Extinguishing Media  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Unsuitable Extinguishing Media  
No information available

Flash Point No information available  
Method - No information available  
Autoignition Temperature No information available  
Explosion Limits  
Upper No data available  
Lower No data available  
Sensitivity to Mechanical Impact No information available  
Sensitivity to Static Discharge No information available  
Specific Hazards Arising from the Chemical  
Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.  
Hazardous Combustion Products  
Oxides of boron. Oxygen.  
Protective Equipment and Precautions for Firefighters  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.  
NFPA  
Health: 2  
Flammability: 0  
Instability: 0  
Physical hazards: N/A

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions**

Avoid dust formation. Ensure adequate ventilation. Use personal protective equipment as required.  
Avoid contact with skin, eyes or clothing.

Environmental Precautions See Section 12 for additional Ecological Information.

### **Methods for Containment and Clean Up**

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

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## **SECTION 7. HANDLING AND STORAGE**

### **Handling**

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood.

### **Storage**

Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed. Keep at temperatures below 40°C.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal Protective Equipment

##### Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

##### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

##### Respiratory Protection

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Powder Solid

Appearance White

Odor Odorless

Odor Threshold No information available

pH 10.4 1% aq.solution

Melting Point/Range 60 °C / 140 °F

Boiling Point/Range No information available

Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

Upper No data available

Lower No data available

Vapor Pressure 1.3 mbar @ 30 °C

Vapor Density Not applicable

Density 1.731 g/cm<sup>3</sup>

Specific Gravity No information available

Solubility 21.5 g/l (18°C)

Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available

Decomposition Temperature 150 - 400 °C

Viscosity Not applicable

Molecular Formula B Na O<sub>3</sub> . 4 H<sub>2</sub> O

Molecular Weight 153.86

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## SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Finely powdered metals, Strong reducing agents, Combustible material

Hazardous Decomposition Products Oxides of boron, Oxygen

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

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## SECTION 11. TOXICOLOGICAL INFORMATION

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes eye burns

Sensitization No information available

Mutagenic Effects No information available

Reproductive Effects Possible risk of impaired fertility. Possible risk of harm to the unborn child.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and

delayed

No information available

Endocrine Disruptor Information No information available

Other Adverse Effects See actual entry in RTECS for complete information.

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## SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

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## SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

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## SECTION 14. TRANSPORT INFORMATION

DOT

UN-No UN3377

Proper Shipping Name SODIUM PERBORATE Tetrahydrate

Hazard Class 5.1

Packing Group III

TDG

UN-No UN3377

Proper Shipping Name SODIUM PERBORATE Tetrahydrate

Hazard Class 5.1

Packing Group III

IATA

UN-No UN3377  
Proper Shipping Name SODIUM PERBORATE Tetrahydrate  
Hazard Class 5.1  
Packing Group III  
IMDG/IMO  
UN-No UN3377  
Proper Shipping Name SODIUM PERBORATE Tetrahydrate  
Hazard Class 5.1  
Packing Group III

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## SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations  
SARA 313 Not applicable  
SARA 311/312 Hazard Categories See section 2 for more information  
CWA (Clean Water Act) Not applicable  
Clean Air Act Not applicable  
OSHA - Occupational Safety and  
Health Administration  
Not applicable  
CERCLA Not applicable  
California Proposition 65 This product does not contain any Proposition 65 chemicals.  
U.S. State Right-to-Know  
Regulations  
Not applicable  
U.S. Department of Transportation  
Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N  
U.S. Department of Homeland  
Security  
This product does not contain any DHS chemicals.  
Other International Regulations  
Mexico - Grade No information available

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.