




Sodium Perborate Tetrahydrate		Pricing >
Linear Formula	$\text{BNaO}_3 \cdot 4\text{H}_2\text{O}$	
Pubchem CID	23676691	
MDL Number	MFCD00149231	
EC No.	231-556-4	
IUPAC Name	sodium; 3-oxido dioxaborirane; tetrahydrate	
Beilstein/Reaxys No.	N/A	
SMILES	<chem>B1(OO1)[O-].O.O.O.O.[Na+]</chem>	
Inchl Identifier	InChI=1S/BO3.Na.4H2O/c2-1-3-4-1;;;;/h;;4*1H2/q-1;+1;;;;	
Inchl Key	IBDSNZLUHYKHQP-UHFFFAOYSA-N	
Signal Word	Danger	
Hazard Statements	H272-H302-H318-H335-H360Df	
Hazard Codes	C, T	
Precautionary Statements	P201-P202-P271-P281-P304+P340-P305+P351+P338-P308+P313-P310-P501	
Risk Codes	61-8-22-23-37-41-62	
Safety Statements	53-45	
RTECS Number	SC7350000	
Transport Information	UN 3377 5.1/PG III	
WGK Germany	3	
GHS Pictograms	GHS05 Corrosive  GHS07 Exclamation Point  GHS08 Health Hazard 	

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SAFETY DATA SHEET

Date Accessed: 05/05/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #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:

Domestic, North America +1 800-424-9300

International +1 703-527-3887

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

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

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

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.

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.

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.

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/cm³

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 $B Na O_3 \cdot 4 H_2 O$
Molecular Weight 153.86

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.

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.

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.

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

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

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

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.
