

Safety Data Sheet

Sodium Borate, 4%



Section 1 Product Description

Product Name: Sodium Borate, 4%
Recommended Use: Science education applications
Synonyms: Sodium Tetraborate Solution; Borax Solution
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

GHS Classification:

Other Safety Precautions: Not a dangerous substance according to GHS classification criteria.
No known OSHA hazards.

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	96
Sodium Tetraborate, 10-hydrate	1303-96-4	4

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: N/A
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 Handling and Storage

Handling: Do not ingest or take internally.
Storage: Suitable for any general chemical storage.

Safety Data Sheet

Storage Code: Green - general chemical storage

Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Sodium Tetraborate, 10-hydrate	2 mg/m3 TWA (inhalable fraction, listed under Borate compounds, inorganic)	6 mg/m3 STEL (inhalable fraction, listed under Borate compounds, inorganic)	N/A	N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

No information available

Section 9 Physical Data

Formula: Na₂B₄O₇ • 10 H₂O

Molecular Weight: N/A

Appearance: Colorless Liquid

Odor: None

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: 100 C

Flash Point: No data available

Flammable Limits in Air: N/A

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A

Vapor Density (Air=1): N/A

Specific Gravity: 1

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: N/A

Section 10 Reactivity Data

Reactivity:

Not generally reactive under normal conditions.

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Water-reactive materials, Alkaloidol Salts, Metal Salts

Hazardous Polymerization:

Will not occur

Section 11 Toxicity Data

Routes of Entry

Inhalation, ingestion, eye or skin contact.

Symptoms (Acute):

Gastrointestinal,, Eye Irritation, Respiratory Irritation

Delayed Effects:

No data available

Acute Toxicity:

Chemical Name

Water

CAS Number

7732-18-5

Oral LD50

Oral LD50 Rat
90000 mg/kg

Dermal LD50

Inhalation LC50

Safety Data Sheet

Sodium Tetraborate, 10-hydrate

1303-96-4

Oral LD50 Rat
1200 mg/kg
Oral LD50 Mouse
1060 mg/kg
Oral LD50 Rat
2660 mg/kg
Oral LD50 Mouse
2 GM/KG

Carcinogenicity:

Chemical Name

Sodium Tetraborate, 10-hydrate

CAS Number

1303-96-4

IARC

Listed

NTP

Not listed

OSHA

Not listed

Chronic Effects:

Mutagenicity:

No evidence of a mutagenic effect.

Teratogenicity:

No evidence of a teratogenic effect (birth defect).

Sensitization:

No evidence of a sensitization effect.

Reproductive:

No evidence of negative reproductive effects.

Target Organ Effects:

Acute:

No information available

Chronic:

Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

Overview:

This material is not expected to be harmful to the ecology.

Mobility:

No data

Persistence:

Adsorbs to soil., Dissolved into water

Bioaccumulation:

No data

Degradability:

No data

Other Adverse Effects:

No data

Chemical Name

Water

Sodium Tetraborate, 10-hydrate

CAS Number

7732-18-5

1303-96-4

Eco Toxicity

No data available

Section 13

Disposal Information

Disposal Methods:

Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s):

If discarded, this product is considered a RCRA toxic waste.

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

Not regulated for transport by DOT.

Air - IATA Proper Shipping Name:

Not regulated for air transport by IATA.

Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

Chemical Name

CAS

Number

§ 313 Name

§ 304 RQ

CERCLA RQ

§ 302 TPQ

CAA 112(2) TQ

Sodium Tetraborate, 10-hydrate

1303-96-4

No

No

No

No

No

Section 16

Additional Information

Revised: 10/22/2015

Replaces: 10/13/2015

Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Safety Data Sheet

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health