

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

CAS number 1303-96-4

Synonyms Sodium tetraborate decahydrate, Borax

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Reproductive toxicity (Category 1B)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word	Danger
Hazard statements Precautionary statements	May damage fertility. May damage the unborn child. Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required IF exposed or concerned: Get medical attention/advice Store locked up Dispose of contents/container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS None identified.

SECTION 3: Composition/information on ingredients

Components 3.1

Chemical name	Common name and synonyms	CAS number	Concentration
Water	H2O	7732-18-5	95.5-96.5%
Sodium Borate	Sodium tetraborate decahydrate, Borax	1303-96-4	3.5-4.5%

SECTION 4: First aid measures

4.1 **Description of first-aid measures**

General advice	
lf inhaled	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately if symptoms occur.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed 4.2 None reasonably foreseeable.

Indication of any immediate medical attention and special treatment needed 4.3

Note to Physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 **Extinguishing media**

Suitable extinguishing media	Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.
Unsuitable extinguishing media	No information available.

5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

Special protective equipment and precautions for firefighters 5.3

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

5.4 **Further information**

Flash Point No information available.

Autoignition Temperature No information available.

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Explosion limits

Upper No information available. Lower No information available. No information available. Sensitivity to Mechanical Impact Sensitivity to Static Discharge No information available. NFPA Flammability Physical hazards Health Instability N/A

SECTION 6: Accidental release measures

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6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

6.2 **Environmental precautions**

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Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatibilities

Strong oxidizing agents, strong acids, finely powdered metals.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Туре	Value
Sodium Borate	TWA	10 mg/m3

US. ACGIH Threshold Limit Values

Component	Туре	Value
Sodium Borate	TWA	2 mg/m3
	STEL	6 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Туре	Value
Sodium Borate	TWA	5 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

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 protection

Wear appropriate protective gloves.

Body Protection

Wear appropriate clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

Do not let product enter the drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No information available.
рН	No information available.
Melting Point/Range	No information available.
Boiling Point/Range	No information available.
Evaporation Rate	No information available.
Flammability (solid)	No information available.
Flammability or explosive limit	
Upper	No information available.
Lower	No information available.
Vapor Pressure	No information available.

Vapor Density	No information available.
Density	No information available.
Solubility	Soluble in water.
Partition coefficient; n-octanol/water	No information available.
Autoignition Temp	No information available.
Decomposition Temp	No information available.
Viscosity	No information available.
Molecular Formula	BaNa2O7* 10H2O
Molecular Weight	381.36
VOC Content(%)	No information available.
Oxidizing properties	No information available.

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

- **10.2 Chemical stability** Stable under normal conditions.
- **10.3 Possibility of hazardous reactions** None under normal processing.
- **10.4 Conditions to avoid** Incompatible products. Exposure to air. Avoid dust formation.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Finely powdered metals.

10.6 Hazardous decomposition products

Oxides of boron, sodium oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium Borate	5660 mg/kg (rat)	> 2000 mg/kg (rabbit)	2.03 mg/L (rat)

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin sensitization

May cause irritation of respiratory tract.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Sodium Borate	1303-96-4	Not listed				

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

Experiments have shown reproductive toxicity effects on laboratory animals.

Chronic effects

No information available.

11.2 Additional Information

The toxicologial properties have not been fully invetigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results	
Sodium Borate	EC50	Freshwater algae	2.6-21.8 mg/L	96 h
	EC50	Freshwater algae	158 mg/L	96 h
	LC50	Freshwater fish	340 mg/L	96 h
	LC50	Pimephales promelas	708 mg/L	96 h
	LC50	Water flea	1085-1402mg/L	48 h

12.2 Persistence and degradability

Persistence is unlikely.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment No information available.

12.6 Endocrine disrupting properties No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 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 (US) Not regulated.

IMDG Not regulated.

IATA Not regulated.

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

> TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.

SARA 304 Emergency release notification Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Not listed.

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Safe Drinking Water Act Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed. (Sodium Borate, 1303-96-4)

US. New Jersey Worker and Community Right-to-Know Act

Listed. (Sodium Borate: 1303-96-4 and Water: 7732-18-5)

US. Pennsylvania Worker and Community Right-to-Know Law Listed. (Sodium Borate, 1303-96-4)

California Proposition 65

Not listed.

SECTION 16: Other information

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SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.