



Material Safety Data Sheet

Sodium Borate Solutions, Borax 1-4%, Buffer pH 9.18

Section 1 - Chemical Product and Company Identification

MSDS Name:

Sodium Borate Solution, Borax 1-4%, Buffer pH 9.18

Catalog Numbers:

LC11710, LC12450, LC22960

Synonyms:

None

Company Identification:

LabChem Inc
 200 William Pitt Way
 Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
1303-96-4	Sodium tetraborate	1-4

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Clear, colorless solution*

Caution. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.
 May impair fertility. May cause harm to the unborn child.

Target Organs: *Eyes, skin, respiratory system, reproductive system***Potential Health Effects****Eye:**

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract. Human fatalities have been reported from acute sodium borate poisoning.

Inhalation:

May cause respiratory tract irritation.



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Chronic:

Chronic exposure may cause reproductive disorders and teratogenic effects.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Runoff from fire control or dilution water may cause pollution.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

Not applicable

Flash Point:

Not applicable

NFPA Rating:

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

CAS# 1303-96-4: Health- 2, Flammability- 0, Instability- 0.

Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal. Area may be washed down with water. Larger spills have a herbicidal effect; keep out of sewer.



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Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing.

Storage:

Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	none listed	none listed	none listed
Sodium tetraborate decahydrate	2 mg/m ³ TWA; 6 mg/m ³ STEL	5 mg/m ³ TWA	none listed

OSHA Vacated PELs:

Sodium tetraborate decahydrate: 10 mg/m³ TWA

Personal Protective Equipment**Eyes:**

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:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

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.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Colorless
Odor:	Odorless
pH:	8-9.5
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	< ether
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble



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Specific Gravity/Density: 1.0-1.1
Molecular Formula: Not applicable
Molecular Weight: Not applicable

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong acids, metallic salts, alkaloid salts.

Hazardous Decomposition Products:

Oxides of boron, sodium oxide.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 1303-96-4: VZ2275000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 1303-96-4:

Oral, mouse: LD50 = 2 gm/kg

Oral, rat: LD50 = 2660 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 1303-96-4: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Sodium tetraborate is an eye, skin, and mucous membrane irritant.

Teratogenicity:

Developmental effects were observed in mice, rats, and rabbits after oral administration of boric acid. However, these effects were considered secondary to maternal toxicity (increased liver and kidney weight).

Reproductive:

Adverse reproductive effects have occurred in experimental animals. Boric acid has selectively damaged the testes, sperm production, and fertility in rats and dogs.

Mutagenicity:

No information found

Neurotoxicity:

No information found



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Section 12 - Ecological Information

No information found

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 1303-96-4 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

None of the components are on this list.

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State

State Right to Know:

Sodium tetraborate decahydrate can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Regulations:

None.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 1303-96-4 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 1303-96-4 is listed on Canada's Ingredient Disclosure List.



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Section 16 - Other Information

MSDS Creation Date: February 16, 1998

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