



## 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 <sup>3</sup> TWA; 6 mg/m <sup>3</sup> STEL	5 mg/m <sup>3</sup> TWA	none listed

**OSHA Vacated PELs:**

Sodium tetraborate decahydrate: 10 mg/m<sup>3</sup> 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

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

Revision Date: January 7, 2009

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