



## Material Safety Data Sheet

### Buffer Solution pH 10.0

#### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Buffer Solution pH 10.0

**Catalog Numbers:**

LC12500, LC12510

**Synonyms:****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
1310-73-2	Sodium hydroxide	<1
1303-96-4	Borates, tetra, sodium salts, decahydrate	0.48
Not available.	Blue dye added to LC12510	

#### Section 3 - Hazards Identification

##### EMERGENCY OVERVIEW

*Appearance: colorless - LC12510 color coded blue*

*Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation.*

*Target Organs: none known.*

**Potential Health Effects****Eye:**

May cause eye irritation.

**Skin:**

May cause skin irritation.



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**Ingestion:**

Ingestion may cause severe abdominal pain, vomiting, irritation and burns to gastrointestinal tract.

**Inhalation:**

May cause respiratory tract irritation.

**Chronic:**

May cause dermatitis and conjunctivitis. Prolonged inhalation may cause bronchial irritation, coughing, and bronchial pneumonia. Sodium borate-- prolonged inhalation may cause bronchitis, laryngitis. Repeated ingestion may cause anorexia, irritation to gastrointestinal tract, nausea, vomiting, diarrhea, skin rashes.

## Section 4 - First Aid Measures

**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

**Skin:**

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

**Ingestion:**

Do NOT induce vomiting. Get medical aid. Give conscious victim large quantities of water to dilute.

**Inhalation:**

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

**Notes to Physician:**

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:**

Negligible fire and explosion hazard when exposed to heat or flame. Move container if possible, avoid breathing vapors or dust. May produce toxic vapors of sodium oxide.

**Extinguishing Media:**

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

**Autoignition Temperature:**

No information found.

**Flash Point:**

No information found.

**NFPA Rating:**

CAS# 7732-18-5: Not published.

CAS# 1310-73-2: Not published.

CAS# 1303-96-4: Not published.

CAS# Not available.: Not published.

**Explosion Limits:**

Lower:      Upper:



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#### 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.

#### Section 7 - Handling and Storage

##### Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

##### Storage:

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

#### Section 8 - Exposure Controls, Personal Protection

##### Engineering Controls:

Provide local exhaust or general dilution ventilation.

##### Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sodium hydroxide	None of the components are on this list.	None of the components are on this list.	2 mg/m3 TWA;
Borates, tetra, sodium salts, decahydrate	1 mg/m3 TWA (anhydrous); 5 mg/m3 TWA (decahydrate); 1 mg/m3 TWA (pentahydrate)	5 mg/m3 TWA	None of the components are on this list.

##### OSHA Vacated PELs

Borates, tetra, sodium salts, decahydrate: 10 mg/m3 TWA

Borates, tetra, sodium salts, decahydrate: 10 mg/m3 TWA

#### Personal Protective Equipment

##### Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

##### Skin:

Wear neoprene, natural nitril rubber, or PVC gloves.

##### Clothing:

Wear appropriate protective clothing to prevent skin exposure.

##### Respirators:

Self contained breathing apparatus with full facepiece. Use mist respirator, routine levels.



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#### Section 9 - Physical and Chemical Properties

**Physical State:** Clear liquid  
**Color:** colorless - LC12510 color coded blue  
**Odor:** odorless  
**pH:** 10  
**Vapor Pressure:** No information found.  
**Vapor Density:** No information found.  
**Evaporation Rate:** No information found.  
**Viscosity:** No information found.  
**Boiling Point:** > 100°C (> 212.00°F)  
**Freezing/Melting Point:** < 0°C (< 32.00°F)  
**Decomposition Temperature:** No information found.  
**Solubility in water:** Soluble.  
**Specific Gravity/Density:** 1.0  
**Molecular Formula:** No information found.  
**Molecular Weight:** No information found.

#### Section 10 - Stability and Reactivity

##### Chemical Stability:

Stable under normal temperatures and pressures.

##### Conditions to Avoid:

Incompatible materials.

##### Incompatibilities with Other Materials

Water reactive substances (e.g. sulfuric acid, sodium metal, potassium metal, calcium carbide).

##### Hazardous Decomposition Products

Sodium oxide.

##### Hazardous Polymerization

Has not been reported

#### Section 11 - Toxicological Information

##### RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 1310-73-2: WB4900000.

CAS# 1303-96-4: VZ2275000.

##### LD50/LC50:

CAS# 7732-18-5:

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

CAS# 1310-73-2:

No information found. CAS# 1303-96-4:

Oral, mouse: LD50 = 2 gm/kg

Oral, rat: LD50 = 2660 mg/kg.



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**Carcinogenicity:**

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

CAS# 1310-73-2: 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:****Teratogenicity:****Reproductive:****Mutagenicity****Neurotoxicity**

## 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# 1310-73-2 is listed on the TSCA Inventory.

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

CAS# Not available. is not listed on the TSCA Inventory. It is for research and development use only.

**SARA Reportable Quantities (RQ)**

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

**CERCLA/SARA Section 313**

None of the components are on this list.

**OSHA - Highly Hazardous**

None of the components are on this list.

### US State



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#### State Right to Know

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

Borates, tetra, sodium salts, decahydrate can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

#### California Regulations

#### European/International Regulations

##### Canadian DSL/NDL

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

CAS# 1310-73-2 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# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

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

CAS# Not available. is not listed on Canada's Ingredient Disclosure List.

## Section 16 - Other Information

MSDS Creation Date: July 4, 1998

Revision Date: March 9, 2004

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