



Material Safety Data Sheet Buffer Solutions pH 6.0 to 8.0

Section 1 - Chemical Product and Company Identification

MSDS Name:

Buffer Solutions pH 6.0 to 8.0

Catalog Numbers:

LC12330, LC12350, LC12370, LC12380, LC12390, LC12400, LC12410, LC12420, LC18520, LC18560

Synonyms:

Phosphate Buffer Solutions, pH Adjusted

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 or
011-703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	>80
7558-79-4	Sodium phosphate dibasic	<4
7778-77-0	Potassium phosphate monobasic	<11
7758-11-4	Potassium phosphate dibasic	<8
1310-73-2	Sodium hydroxide	<1

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution (LC12380 is color-coded with yellow dye.)

Caution! May cause eye and skin irritation.

Target Organs: None known.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea.



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Inhalation:

Inhalation of mists may cause respiratory tract irritation.

Chronic:

May cause adverse kidney effects.

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.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur.

Inhalation:

Move victim to fresh air immediately. Get medical aid if irritation or other symptoms appear.

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.

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:

Health- 1, 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 spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.



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Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:

Store tightly capped in a cool, dry, well-ventilated area away from incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

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 phosphate dibasic	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Potassium phosphate monobasic	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Potassium phosphate dibasic	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	2 mg/m ³ Ceiling	2 mg/m ³ Ceiling 10 mg/m ³ IDLH	2 mg/m ³ TWA

OSHA Vacated PELs:

Sodium hydroxide: 2 mg/m³ Ceiling

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. Do not wear contact lenses when working with chemicals.

Skin:

Wear appropriate protective 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. Always use a NIOSH-approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Color: Colorless (except LC12380, which is yellow)
Odor: Odorless
pH: 6-8



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Vapor Pressure: No information found.
Vapor Density: No information found.
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: No information found.
Freezing/Melting Point: No information found.
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, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong acids.

Hazardous Decomposition Products:

Oxides of phosphorus, sodium and potassium oxides.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000
CAS# 7558-79-4: WC4500000
CAS# 7778-77-0: TC6615500
CAS# 7558-11-4: Not available
CAS# 1310-73-2: WB4900000

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg
CAS# 7558-79-4:
Oral, rat: LD50 = 17 g/kg
CAS# 7778-77-0:
Oral, rat: LD50 = 1700 mg/kg
Dermal, rabbit: LD50 = 4640 mg/kg
CAS# 7758-11-4:
Oral, rat: LD50 = 8 g/kg
CAS# 1310-73-2:
Dermal, rabbit: LD50 = 1350 mg/kg

Carcinogenicity:

None of the chemicals in this product are listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.



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Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

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# 7558-79-4 is listed on the TSCA Inventory.

CAS# 7778-77-0 is listed on the TSCA Inventory.

CAS# 7758-11-4 is listed on the TSCA Inventory.

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

SARA Reportable Quantities (RQ):

CAS# 7558-79-4: final RQ = 5000 pounds (2270 kg)

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.



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US State

State Right to Know:

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

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

California Regulations:

None

European/International Regulations

Canadian DSL/NDSL:

All of the components of this product are listed on Canada's DSL List.

Canada Ingredient Disclosure List:

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

CAS# 7558-79-4 is not listed on Canada's Ingredient Disclosure List.

CAS# 7778-77-0 is not listed on Canada's Ingredient Disclosure List.

CAS# 7758-11-4 is not listed on Canada's Ingredient Disclosure List.

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

Section 16 - Other Information

MSDS Creation Date: February 15, 1998

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