



## Material Safety Data Sheet

### Buffer solution B

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Buffer solution B

**Catalog Numbers:**

LC12575

**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 |
| 7791-18-6 | Magnesium chloride, hexahydrate | 3       |
| 64-19-7   | Acetic acid                     | 2       |
| 6131-90-4 | sodium acetate, trihydrate      | 0.5     |
| 7757-79-1 | Potassium nitrate               | 0.1     |
| 7757-82-6 | Sodium sulfate (solution)       | 0.01    |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

*Appearance: colorless*

*May cause irritation by all exposure routes. This is expected to be a low hazard for usual industrial handling.*

*Target Organs: none known.*

#### Potential Health Effects

**Eye:**

May cause eye irritation.



## Material Safety Data Sheet

### Buffer solution B

**Skin:**

May cause mild skin irritation.

**Ingestion:**

May cause gastrointestinal irritation.

**Inhalation:**

May cause respiratory tract irritation.

**Chronic:**

May cause dermatitis and conjunctivitis.

### 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 at once. If victim is conscious, give 2-4 glasses of water to dilute material.

**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.

**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# 7791-18-6: Not published.

CAS # 64-19-7 health-3; flammability-2; reactivity-0

CAS# 6131-90-4: Not published.

CAS# 7757-79-1: Not published.

CAS# 7757-82-6: Not published.

**Explosion Limits:**

Lower:      Upper:



# Material Safety Data Sheet

## Buffer solution B

### 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. |
| Magnesium chloride, hexahydrate | None of the components are on this list. | None of the components are on this list. | None of the components are on this list. |
| Acetic acid                     | 10 ppm TWA; 15 ppm STEL                  | 10 ppm TWA; 25 mg/m <sup>3</sup> TWA     | 10 ppm TWA; 25 mg/m <sup>3</sup> TWA;    |
| sodium acetate, trihydrate      | 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 nitrate               | 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 sulfate (solution)       | None of the components are on this list. | None of the components are on this list. | None of the components are on this list. |

#### OSHA Vacated PELs

Acetic acid: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA  
Acetic acid: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA  
Acetic acid: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA  
Acetic acid: 10 ppm TWA; 25 mg/m<sup>3</sup> 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 appropriate protective gloves to prevent skin exposure.

#### Clothing:

Wear appropriate protective clothing to prevent skin exposure.



## Material Safety Data Sheet

### Buffer solution B

#### Respirators:

Not required for normal use. Firefighting-- any self-contained breathing apparatus with full facepiece operated in pressure-demand mode.

## Section 9 - Physical and Chemical Properties

**Physical State:** Clear liquid  
**Color:** colorless  
**Odor:** odorless  
**pH:** neutral  
**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:

None reported.

#### Incompatibilities with Other Materials

None reported.

#### Hazardous Decomposition Products

Oxides of nitrogen, oxides of carbon.

#### Hazardous Polymerization

Has not been reported

## Section 11 - Toxicological Information

#### RTECS:

CAS# 7732-18-5: ZC0110000.  
CAS# 7791-18-6: OM2975000.  
CAS# 64-19-7: AF1225000.  
CAS# 6131-90-4: AJ4580000.  
CAS# 7757-79-1: TT3700000.  
CAS# 7757-82-6: WE1650000.



## Material Safety Data Sheet

### Buffer solution B

#### LD50/LC50:

CAS# 7732-18-5:

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

CAS# 7791-18-6:

Oral, mouse: LD50 = 7600 mg/kg

Oral, rat: LD50 = 8100 mg/kg.

CAS# 64-19-7:

Inhalation, mouse: LC50 = 5620 ppm/1H

Oral, rat: LD50 = 3310 mg/kg

Skin, rabbit: LD50 = 1060 mg/kg.

CAS# 6131-90-4:

No information found. CAS# 7757-79-1:

Oral, rabbit: LD50 = 1901 mg/kg

Oral, rat: LD50 = 3750 mg/kg.

CAS# 7757-82-6:

Oral, mouse: LD50 = 5989 mg/kg.

#### Carcinogenicity:

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

CAS# 7791-18-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 64-19-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 6131-90-4: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7757-79-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7757-82-6: 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:**



# Material Safety Data Sheet

## Buffer solution B

### Section 15 - Regulatory Information

#### US Federal

##### TSCA

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

CAS# 7791-18-6 is not listed on the TSCA Inventory. It is for research and development use only.

CAS# 64-19-7 is listed on the TSCA Inventory.

CAS# 6131-90-4 is not on the TSCA Inventory, however, its anhydrous form is on the inventory and so this hydrate is exempt from TSCA Inventory requirements (40CFR270.3(u)(2)).

CAS# 7757-79-1 is listed on the TSCA Inventory.

CAS# 7757-82-6 is listed on the TSCA Inventory.

##### SARA Reportable Quantities (RQ)

CAS# 64-19-7: final RQ = 5000 pounds (2270 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

##### State Right to Know

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

Potassium nitrate can be found on the following state Right-to-Know lists: New Jersey, Florida, Pennsylvania, Massachusetts.

Sodium sulfate (solution) can be found on the following state Right-to-Know lists: Pennsylvania, Massachusetts.

##### California Regulations

#### European/International Regulations

##### Canadian DSL/NDSL

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

CAS# 64-19-7 is listed on Canada's DSL List.

CAS# 7757-79-1 is listed on Canada's DSL List.

CAS# 7757-82-6 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# 7791-18-6 is not listed on Canada's Ingredient Disclosure List.

CAS# 64-19-7 is listed on Canada's Ingredient Disclosure List.

CAS# 6131-90-4 is not listed on Canada's Ingredient Disclosure List.

CAS# 7757-79-1 is not listed on Canada's Ingredient Disclosure List.

CAS# 7757-82-6 is not listed on Canada's Ingredient Disclosure List.

### Section 16 - Other Information

MSDS Creation Date: August 30, 1998

Revision Date: March 9, 2004



**Material Safety Data Sheet**  
**Buffer solution B**

*Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.*