



Material Safety Data Sheet
Buffer solutions pH 1.00 through 2.00

Section 1 - Chemical Product and Company Identification

MSDS Name:

Buffer solutions pH 1.00 through 2.00

Catalog Numbers:

LC12180, LC12200, LC12220

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
7447-40-7	Potassium chloride	<1
7647-01-0	Hydrogen chloride	<1

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

*Appearance: Colorless**Caution! May cause irritation by all exposure routes.**Target Organs: none known.***Potential Health Effects****Eye:**

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause gastrointestinal irritation.



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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. If victim is unconscious, 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# 7447-40-7: Not published.

CAS# 7647-01-0: Not published.

Explosion Limits:

Lower: Upper:

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.



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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.
Potassium chloride	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Hydrogen chloride	None of the components are on this list.	None of the components are on this list.	C 5 ppm; C 7 mg/m ³ ;

OSHA Vacated PELs**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.

Respirators:

Not required for normal use. Fire fighting--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: 1-2

Vapor Pressure: 14mm Hg @20°C

Vapor Density: > air

Evaporation Rate: < ether

Viscosity: No information found.

Boiling Point: > 212°F (> 100.00°C)



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Freezing/Melting Point: < 32°F (< 0.00°C)
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

Acrid smoke and fumes.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.
CAS# 7447-40-7: TS8050000.
CAS# 7647-01-0: MW4025000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 7447-40-7:
Oral, mouse: LD50 = 1500 mg/kg
Oral, rat: LD50 = 2600 mg/kg.
CAS# 7647-01-0:
Inhalation, mouse: LC50 = 1108 ppm/1H
Inhalation, rat: LC50 = 3124 ppm/1H
Oral, rabbit: LD50 = 900 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7447-40-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7647-01-0
ACGIH: Not listed.
California: Not listed.
NIOSH: Not listed.
NTP: Not listed.
OSHA: Not listed.
IARC: Group 3



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Epidemiology:

Teratogenicity:

Reproductive:

Mutagenicity

Mutagenic data in RTECS.

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

pH 1.0

pH 1.07 to 2.0

Shipping Name: Hydrochloric acid solution

Not regulated.

Hazard Class: 8

UN Number: UN1789

Packing Group: PG III

Section 15 - Regulatory Information

US Federal

TSCA

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

CAS# 7447-40-7 is listed on the TSCA Inventory.

CAS# 7647-01-0 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

CAS# 7647-01-0: final RQ = 5000 pounds (2270 kg)

CERCLA/SARA Section 313

Hydrogen chloride is not at a high enough concentration to be reportable under Section 313.

OSHA - Highly Hazardous

CAS# 7647-01-0 is considered highly hazardous by OSHA.

US State

State Right to Know

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



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California Regulations

European/International Regulations

Canadian DSL/NDSL

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

CAS# 7447-40-7 is listed on Canada's DSL List.

CAS# 7647-01-0 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# 7447-40-7 is not listed on Canada's Ingredient Disclosure List.

CAS# 7647-01-0 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 26, 1998

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