



Material Safety Data Sheet

Buffer for nitrate

Section 1 - Chemical Product and Company Identification

MSDS Name:

Buffer for nitrate

Catalog Numbers:

LC12576

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
10043-01-3	Aluminum sulfate	1.7
10294-26-5	silver sulfate	0.34
5329-14-6	Sulfamic acid	0.25
10043-35-3	Boric acid (h3bo3)	0.13

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.



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Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

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:

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# 10043-01-3: Not published.

CAS# 10294-26-5: Not published.

CAS# 5329-14-6: Not published.

CAS# 10043-35-3: 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.
Aluminum sulfate	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
silver sulfate	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sulfamic acid	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Boric acid (h3bo3)	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**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. Firefighting--any self-contained breathing apparatus with full facepiece operated in pressure-demand mode.



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Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Color: Colorless
Odor: Odorless
pH: No information found.
Vapor Pressure: No information found.
Vapor Density: > Air
Evaporation Rate: < Ether
Viscosity: No information found.
Boiling Point: > 212°F (> 100.00°C)
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:

None reported.

Incompatibilities with Other Materials

None reported.

Hazardous Decomposition Products

Oxides of nitrogen, oxides of sulfur.

Hazardous Polymerization

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.
CAS# 10043-01-3: BD1700000.
CAS# 10294-26-5 unlisted.
CAS# 5329-14-6: WO5950000.
CAS# 10043-35-3: ED4550000.



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LD50/LC50:

CAS# 7732-18-5:

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

CAS# 10043-01-3:

Oral, mouse: LD50 = 6207 mg/kg.

CAS# 10294-26-5:

No information found. CAS# 5329-14-6:

Oral, mouse: LD50 = 1312 mg/kg

Oral, rat: LD50 = 3160 mg/kg.

CAS# 10043-35-3:

Oral, mouse: LD50 = 3450 mg/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# 10043-01-3: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 10294-26-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 5329-14-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 10043-35-3: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Concentrated components may be an eye, skin, mucous membrane irritant. May be harmful if ingested.

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



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TSCA

CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 10043-01-3 is listed on the TSCA Inventory.
CAS# 10294-26-5 is listed on the TSCA Inventory.
CAS# 5329-14-6 is listed on the TSCA Inventory.
CAS# 10043-35-3 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ)

CAS# 10043-01-3: 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

Aluminum sulfate can be found on the following state Right-to-Know lists: California, New Jersey, Florida, (listed as ** undefined **), Pennsylvania, Minnesota, (listed as ** undefined **), Massachusetts.

Sulfamic acid can be found on the following state Right-to-Know lists: New Jersey.

California Regulations

European/International Regulations

Canadian DSL/NDSL

CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 10043-01-3 is listed on Canada's DSL List.
CAS# 10294-26-5 is listed on Canada's DSL List.
CAS# 5329-14-6 is listed on Canada's DSL List.
CAS# 10043-35-3 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# 10043-01-3 is not listed on Canada's Ingredient Disclosure List.
CAS# 10294-26-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 5329-14-6 is listed on Canada's Ingredient Disclosure List.
CAS# 10043-35-3 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: August 30, 1998

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