

Material Safety Data Sheet

Buffer Solution pH 9.00

ACC# 41120

Section 1 - Chemical Product and Company Identification

MSDS Name: Buffer Solution pH 9.00

Catalog Numbers: S79928-8, SB114-1, SB114-20, SB114-500

Synonyms: None

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7732-18-5	Water	99.17	231-791-2
7447-40-7	Potassium chloride	0.4	231-211-8
10043-35-3	Boric acid (H3BO3)	0.3	233-139-2
1310-73-2	Sodium hydroxide	0.1	215-185-5
64-02-8	Tetrasodium EDTA	0.03	200-573-9

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: not available liquid.

Caution! May cause eye, skin, and respiratory tract irritation.

Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract.

Inhalation: May cause respiratory tract irritation.

Chronic: Not available.

Section 4 - First Aid Measures

Eyes: Get medical aid. Gently lift eyelids and flush continuously with water.

Skin: Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion: Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Avoid contact with eyes. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Good general ventilation should be sufficient to control airborne levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Water	none listed	none listed	none listed
Potassium chloride	none listed	none listed	none listed
Boric acid (H ₃ BO ₃)	2 mg/m ³ TWA (inhalable fraction, listed under Borate compounds, inorganic); 6 mg/m ³ STEL (inhalable fraction, listed under Borate compounds, inorganic)	none listed	none listed
Sodium hydroxide	2 mg/m ³ Ceiling	10 mg/m ³ IDLH	2 mg/m ³ TWA
Tetrasodium EDTA	none listed	none listed	none listed

OSHA Vacated PELs: Water: No OSHA Vacated PELs are listed for this chemical. Potassium chloride: No OSHA Vacated PELs are listed for this chemical. Boric acid (H₃BO₃): No OSHA Vacated PELs are listed for this chemical. Sodium hydroxide: No OSHA Vacated PELs are listed for this chemical. Tetrasodium EDTA: No OSHA Vacated PELs are listed for this chemical.

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 or European Standard EN166.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: not available
Odor: none reported
pH: 9.00
Vapor Pressure: Not available.
Vapor Density: 0.7
Evaporation Rate:Not available.
Viscosity: Not available.
Boiling Point: 100 deg C
Freezing/Melting Point:0 deg C
Decomposition Temperature:Not available.
Solubility: Soluble in water.
Specific Gravity/Density:Not available.
Molecular Formula:Mixture
Molecular Weight:Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable.
Conditions to Avoid: None reported.
Incompatibilities with Other Materials: There is no information for any incompatibilities for this substance.
Hazardous Decomposition Products: Irritating and toxic gases.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 7732-18-5: ZC0110000
CAS# 7447-40-7: TS8050000
CAS# 10043-35-3: ED4550000; ED4560000
CAS# 1310-73-2: WB4900000
CAS# 64-02-8: AH5075000

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg;

CAS# 7447-40-7:
Draize test, rabbit, eye: 500 mg/24H Mild;
Oral, mouse: LD50 = 1500 mg/kg;
Oral, rat: LD50 = 2600 mg/kg;

CAS# 10043-35-3:

Oral, mouse: LD50 = 3450 mg/kg;
Oral, rat: LD50 = 2660 mg/kg;
Oral, rat: LD50 = 2500 mg/kg;

CAS# 1310-73-2:

Draize test, rabbit, eye: 400 ug Mild;
Draize test, rabbit, eye: 1% Severe;
Draize test, rabbit, eye: 50 ug/24H Severe;
Draize test, rabbit, eye: 1 mg/24H Severe;
Draize test, rabbit, skin: 500 mg/24H Severe;

CAS# 64-02-8:

Draize test, rabbit, eye: 1900 ug;
Draize test, rabbit, eye: 100 mg/24H Moderate;
Draize test, rabbit, skin: 500 mg/24H Moderate;

Carcinogenicity:

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7447-40-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 10043-35-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 1310-73-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 64-02-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: No data available.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No information reported.

Physical: No information available.

Other: None.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate

classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

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# 10043-35-3 is listed on the TSCA inventory.

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

CAS# 64-02-8 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 7447-40-7: immediate.

CAS # 10043-35-3: immediate, delayed.

CAS # 1310-73-2: immediate, reactive.

CAS # 64-02-8: immediate.

Section 313

This material contains Potassium chloride (listed as Water Dissociable Nitrate Compounds), 0.4%, (CAS# 7447-40-7) which is subject to the reporting

requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7447-40-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 10043-35-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 1310-73-2 can be found on the following state right to know lists:

California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 64-02-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7732-18-5: No information available.

CAS# 7447-40-7: 1

CAS# 10043-35-3: 1

CAS# 1310-73-2: 1

CAS# 64-02-8: 2

Canada - 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# 10043-35-3 is listed on Canada's DSL List.

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

CAS# 64-02-8 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of Not controlled..

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 7447-40-7 is not listed on the Canadian Ingredient Disclosure List.

CAS# 10043-35-3 is listed on the Canadian Ingredient Disclosure List.
CAS# 1310-73-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997

Revision #5 Date: 11/07/2007

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.