

Material Safety Data Sheet

Buffer Solution pH 10.0 (Color-Coded Blue)

ACC# 41141

Section 1 - Chemical Product and Company Identification

MSDS Name: Buffer Solution pH 10.0 (Color-Coded Blue)

Catalog Numbers: 13636AR10, 13636AR11, 13636AR12C, 13636AR15, 13636AR25, 13636AR26, 13636AR50, NC9668634, SB115 20, SB115 4, SB115 500, SB11520, SB1154, SB115500, XX15254L

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
584-08-7	Potassium carbonate	0.6	209-529-3
1310-58-3	Potassium hydroxide	0.2	215-181-3
1332-77-0	Potassium borate	0.4	215-575-5
3844-45-9	C.I. Acid blue 9, disodium salt	0.02	223-339-8
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate dihydrate	1.0	unlisted
7732-18-5	Water	Balance	231-791-2

Hazard Symbols: None listed.

Risk Phrases: None listed.

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless. **Caution!** This is expected to be a low hazard for usual industrial handling. May cause irritation.

Target Organs: None.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause mild skin irritation. Low hazard for usual industrial handling.

Ingestion: Low hazard for usual industrial handling. May cause gastric disturbances and electrolytic imbalance.

Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.
Chronic: None

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

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

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

Antidote: None reported.

Section 5 - Firefighting 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. For small fires, use dry chemical, carbon dioxide, water spray or regular foam.

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash hands before eating. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage: Store in a cool, dry place. No special precautions indicated.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium carbonate	none listed	none listed	none listed
Potassium hydroxide	C 2 mg/m ³	2 mg/m ³ TWA	none listed
Potassium borate	none listed	none listed	none listed
C.I. Acid blue 9, disodium salt	none listed	none listed	none listed
Disodium dihydrogen ethylenediaminetetraacetatedihydrate	none listed	none listed	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Potassium carbonate: No OSHA Vacated PELs are listed for this chemical. Potassium hydroxide: No OSHA Vacated PELs are listed for this chemical. Potassium borate: No OSHA Vacated PELs are listed for this chemical. C.I. Acid blue 9, disodium salt: No OSHA Vacated PELs are listed for this chemical. Disodium dihydrogen ethylenediaminetetraacetatedihydrate: No OSHA Vacated PELs are listed for this chemical. Water: 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 protective gloves to prevent skin exposure.

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

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: odorless

pH: 10.0

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: >1 (Water=1)

Viscosity: Not available.

Boiling Point: 212 deg F

Freezing/Melting Point: 32 deg F

Decomposition Temperature: Not available.

Autoignition Temperature: Not applicable.

Flash Point: Not available.

NFPA Rating: Not published.

Explosion Limits, Lower: Not available.

Upper: 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: Not available.
Hazardous Decomposition Products: None.
Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 584-08-7 unlisted.

CAS# 1310-58-3 unlisted.

CAS# 1332-77-0 unlisted.

CAS# 3844-45-9 unlisted.

CAS# 6381-92-6 unlisted.

CAS# 7732-18-5 unlisted.

LD50/LC50:

CAS# 584-08-7:

Oral, mouse: LD50 = 2570 mg/kg;

Oral, rat: LD50 = 1870 mg/kg;

CAS# 1310-58-3:

Draize test, rabbit, skin: 50 mg/24H Severe;

Oral, rat: LD50 = 273 mg/kg;

CAS# 1332-77-0:

CAS# 3844-45-9:

CAS# 6381-92-6:

CAS# 7732-18-5:

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

Carcinogenicity:

CAS# 584-08-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. **CAS#** 1310-58-3: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. **CAS#** 1332-77-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. **CAS#** 3844-45-9:

IARC: Group 3 carcinogen **CAS#** 6381-92-6: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. **CAS#** 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: No information available.

Other Studies: No data available.

Section 12 - Ecological Information

Ecotoxicity: Not available.

Environmental Fate: No information found.

Physical/Chemical: No information found.

Other: Not available.

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	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.				No information available.
Hazard Class:					
UN Number:					
Packing Group:					

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 584-08-7 is listed on the TSCA inventory.

CAS# 1310-58-3 is listed on the TSCA inventory.

CAS# 1332-77-0 is listed on the TSCA inventory.

CAS# 3844-45-9 is listed on the TSCA inventory.

CAS# 6381-92-6 is not on the TSCA Inventory. It is a hydrate and exempt from TSCA Inventory requirements (40CFR720.3(u)(2)).

CAS# 7732-18-5 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.

SARA

Section 302 (RQ)

CAS# 1310-58-3: final RQ = 1000 pounds (454 kg)

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 584-08-7: acute. CAS # 1310-58-3: acute, reactive. CAS # 6381-92-6: acute.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 1310-58-3 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# 584-08-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 1310-58-3 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 1332-77-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 3844-45-9 can be found on the following state right to know lists: California, New Jersey, Massachusetts.

CAS# 6381-92-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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

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# 584-08-7: 1

CAS# 1310-58-3: 1

CAS# 1332-77-0: No information available.

CAS# 3844-45-9: 1

CAS# 6381-92-6: 2

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

Canada

CAS# 584-08-7 is listed on Canada's DSL/NDSL List.

CAS# 1310-58-3 is listed on Canada's DSL/NDSL List.

CAS# 1332-77-0 is listed on Canada's DSL/NDSL List.

CAS# 3844-45-9 is listed on Canada's DSL/NDSL List.

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

This product does not have a WHMIS classification.

CAS# 584-08-7 is listed on Canada's Ingredient Disclosure List.

CAS# 1310-58-3 is listed on Canada's Ingredient Disclosure List.

CAS# 1332-77-0 is not listed on Canada's Ingredient Disclosure List.

CAS# 3844-45-9 is not listed on Canada's Ingredient Disclosure List.

CAS# 6381-92-6 is not listed on Canada's Ingredient Disclosure List.

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

Exposure Limits

CAS# 1310-58-3: OEL-AUSTRALIA:TWA 2 mg/m³ OEL-BELGIUM:STEL 2 mg/m³
OEL-DENMARK:TWA 2 mg/m³ OEL-FINLAND:TWA 2 mg/m³ OEL-FRANCE:STEL 2 m
g/m³ OEL-JAPAN:STEL 2 mg/m³ OEL-THE NETHERLANDS:TWA 2 mg/m³ OEL-SWI
TZERLAND:TWA 2 mg/m³ OEL-UNITED KINGDOM:TWA 2 mg/m³;STEL 2 mg/m³ OEL
IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEAL
AND, SINGAPORE, VIETNAM check ACGI TLV

Section 16 - Additional Information

MSDS Creation Date: 4/27/1999

Revision #3 Date: 1/16/2001

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 way 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.