Material Safety Data Sheet
Buffer Solution pH 7.4

MSDS\# 41135
Section 1 - Chemical Product and Company Identification
MSDS Name:
Catalog Numbers:
Synonyms:

Company Identification:
For information in the US, call: Buffer Solution pH 7.4
SB110-1, SB110-500
None
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Number US:
201-796-7100

CHEMTREC Phone Number, US:
201-796-7100
800-424-9300
Section 2 - Composition, Information on Ingredients

## Risk Phrases:

| CAS\#: | $64-02-8$ |
| :--- | :--- |
| Chemical Name: | Tetrasodium EDTA |
| \%: | $<1.0$ |
| EINECS\#: | $200-573-9$ |

Hazard Symbols:

Risk Phrases:

## CAS\#:

Chemical Name:
\%:
EINECS\#:
7732-18-5
Water
99.0

Hazard Symbols:
$\qquad$

Risk Phrases:

## CAS\#:

Chemical Name:
\%:
EINECS\#:
7758-11-4
Dipotassium phosphate

Hazard Symbols:

## Risk Phrases:

| CAS\#: | $7778-77-0$ |
| :--- | :--- |
| Chemical Name: | Potassium phosphate monobasic |
| $\%:$ | $<1.0$ |
| EINECS\#: | $231-913-4$ |

Hazard Symbols:

Text for R-phrases: see Section 16
Hazard Symbols:
None listed
Risk Phrases:

Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Caution! This is expected to be a low hazard for usual industrial handling. May cause eye, skin, and respiratory tract irritation. Target Organs: None.
Potential Health Effects
Eye: May cause mild eye irritation.
Skin: May cause 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: No information found.

## Section 4 - First Aid Measures

Eyes: Get medical aid. Gently lift eyelids and flush continuously with water.
Skin: $\quad$ 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:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
Notes to
Physician:

## 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.

## Autoignition Not applicable.

Flash Point: Not applicable.
Explosion Limits: Not available
Lower:
Explosion Limits:
Upper:
Not available
NFPA Rating: 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.
Storage: Store in a cool, dry place.
Section 8 - Exposure Controls, Personal Protection

| Chemical Name \| ACGIH | NIOSH | \|OSHA - Final |
| :---: | :---: | :---: |
| Tetrasodium EDTA \|none listed | \| none listed | \| none listed |
| Water \|none listed | \| none listed | \|none listed |
| Dipotassium phospha\|none listed te | \|none listed | | \|none listed |
| Potassium phosphate\|none listed monobasic | | \|none listed | | \|none listed | |

OSHA Vacated PELs: Tetrasodium EDTA: None listed Water: None listed Dipotassium phosphate: None listed Potassium phosphate monobasic: None listed
Engineering Controls:
Good general ventilation should be sufficient to control airborne levels.
Exposure Limits
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. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: 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<br>Physical State: Liquid<br>Color: not available<br>Odor: none reported<br>pH: 7.4 @ $25^{\circ} \mathrm{C}$<br>Vapor Pressure: Not available<br>Vapor Density: Not available<br>Evaporation Rate: Not available<br>Viscosity: Not available<br>Boiling Point: $100 \mathrm{deg} \mathrm{C}\left(212.00^{\circ} \mathrm{F}\right)$<br>Freezing/Melting Point: $0 \operatorname{deg} \mathrm{C}\left(32.00^{\circ} \mathrm{F}\right)$<br>Decomposition Temperature: Not available<br>Solubility in water: Soluble in water.<br>Specific Gravity/Density: 1.0<br>Molecular Formula: Mixture<br>Molecular Weight: 0<br>Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition Products
Hazardous Polymerization

Stable.
None reported.
Not available
None.
Has not been reported.

Section 11 - Toxicological Information
CAS\# 64-02-8: AH5075000
RTECS\#: CAS\# 7732-18-5: ZC0110000
CAS\# 7758-11-4: None listed
CAS\# 7778-77-0: TC6615500
RTECS:
CAS\# 64-02-8: Draize test, rabbit, eye: 1900 ug;
Draize test, rabbit, eye: $100 \mathrm{mg} / 24 \mathrm{H}$ Moderate; Draize test, rabbit, skin: $500 \mathrm{mg} / 24 \mathrm{H}$ Moderate;

RTECS:
LD50/LC50: CAS\# 7732-18-5: Oral, rat: LD50 $=>90 \mathrm{~mL} / \mathrm{kg}$;
RTECS:
CAS\# 7758-11-4:.

RTECS:
CAS\# 7778-77-0: Skin, rabbit: LD50 $=>4640 \mathrm{mg} / \mathrm{kg}$;

Tetrasodium EDTA - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Dipotassium phosphate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Potassium phosphate monobasic - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Other: $\quad$ See actual entry in RTECS for complete information.

Section 12 - Ecological Information
Other: No information available.

Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: Not Regulated
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

## Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:Not available
Risk Phrases:
Safety Phrases:
$\quad$ S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection)
CAS\# 64-02-8: 2
CAS\# 7732-18-5: Not available
CAS\# 7758-11-4: 1
CAS\# 7778-77-0: 1
Canada
CAS\# 64-02-8 is listed on Canada's DSL List
CAS\# 7732-18-5 is listed on Canada's DSL List
CAS\# 7758-11-4 is listed on Canada's DSL List
CAS\# 7778-77-0 is listed on Canada's DSL List
Canadian WHMIS Classifications: Not available
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.
CAS\# 64-02-8 is not listed on Canada's Ingredient Disclosure List.
CAS\# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS\# 7758-11-4 is not listed on Canada's Ingredient Disclosure List.
CAS\# 7778-77-0 is not listed on Canada's Ingredient Disclosure List.

CAS\# 64-02-8 is listed on the TSCA Inventory.
CAS\# 7732-18-5 is listed on the TSCA
Inventory.
CAS\# 7758-11-4 is listed on the TSCA
Inventory.
CAS\# 7778-77-0 is listed on the TSCA
Inventory.
Section 16 - Other Information

Revision \#6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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 the company 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 the company has been advised of the possibility of such damages.

