

4-11-06

DATE: 03/30/06 ACCT: 888235001
 INDBX: D60874832 CAT NO: SB105 PO NBR: 32806

**** MATERIAL SAFETY DATA SHEET ****

Buffer Solution pH 10
 58235 - (KIT)
 41118 - (individual)

*** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ***

MSDS Name: Buffer Solution pH 10
 SB105, SB105, SB105, SB105, SB105, SB105, SB105, SB105, SB105, SB105

Synonyms:
 None

Company Identification: Fisher Diagnostics
 Fisher Scientific Company LLC
 8365 Valley Pike
 Middletown, VA 22645-0307

For information, call: 800-528-0494
 Emergency Number: 800-524-0294
 For CHEMTREC assistance, call: 800-424-9300
 For International CHEMTREC assistance, call: 703-527-3887
 Section 2 - Composition, Information on Ingredients

CAS#: 584-08-7
 Chemical Name: Potassium carbonate
 %: 0.6
 EINECS#: 209-529-3
 Hazard Symbols:
 Risk Phrases:

CAS#: 1310-58-3
 Chemical Name: Potassium hydroxide
 %: 0.2
 EINECS#: 215-181-3
 Hazard Symbols:
 Risk Phrases:

CAS#: 6381-92-6
 Chemical Name: Disodium ethylenediaminetetraacetate dihydrate
 %: 1.0
 EINECS#: unlisted
 Hazard Symbols:
 Risk Phrases:

CAS#: 7732-18-5
 Chemical Name: Water
 %: 97.8
 EINECS#: 231-791-2
 Hazard Symbols:
 Risk Phrases:

CAS#: 12228-88-5
 Chemical Name: Potassium Borate
 %: 0.4
 EINECS#: unlisted
 Hazard Symbols:
 Risk Phrases:

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

Section 3 - Hazards Identification
 EMERGENCY OVERVIEW

Caution! 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: No information found.

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:

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If victim is conscious and alert, give 2-4 cupfuls of milk or water.
 Get medical aid.

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

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use extinguishing media appropriate to the surrounding fire. Substance is noncombustible.

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

Autoignition Temperature: Not available.

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 0; instability: 0;

General Information: Section 6 - Accidental Release Measures

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. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section.
 Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with skin and 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.

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|--|-----------------|-------------|-------------------|
| Potassium carbonate | none listed | none listed | none listed |
| Potassium hydroxide | 2 mg/m3 Ceiling | none listed | none listed |
| Disodium ethylenediaminetetraacetate dihydrate | none listed | none listed | none listed |
| Water | none listed | none listed | none listed |
| Potassium Borate | none listed | none listed | none listed |

OSHA Vacated PELs:
 Potassium carbonate: None listed
 Potassium hydroxide: None listed
 Disodium ethylenediaminetetraacetate dihydrate: None listed
 Water: None listed
 Potassium Borate: None listed
 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 butyl rubber 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.

Physical State: Section 9 - Physical and Chemical Properties
 Liquid
 Color: clear, colorless

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Odor: odorless
pH: 10
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: >1.0 (Ether=1)
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: Not available
Decomposition Temperature: Not available
Solubility in water: soluble
Specific Gravity/Density: Solution
Molecular Formula: 0
Molecular Weight: 0

Chemical Stability: Section 10 - Stability and Reactivity
Stable.

Conditions to Avoid: None reported.
Incompatibilities with Other Materials: None reported.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Has not been reported.
Section 11 - Toxicological Information

RTECS#:
CAS# 584-08-7: TS7750000
CAS# 1310-58-3: TT2100000
CAS# 6381-92-6: AH4410000
CAS# 7732-18-5: ZC0110000
CAS# 12228-88-5: None listed

LD50/LC50:
RTECS: CAS# 584-08-7: Oral, mouse: LD50 = 2570 mg/kg;
Oral, rat: LD50 = 1870 mg/kg;
RTECS: CAS# 1310-58-3: Draize test, rabbit, 50 mg/24H Severe; Oral, rat: LD50 = 273 mg/kg;.
RTECS: CAS# 6381-92-6:.
RTECS: CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;.

RTECS: CAS# 12228-88-5:.
Carcinogenicity:
Potassium carbonate -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Potassium hydroxide -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Disodium ethylenediaminetetraacetate dihydrate -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Water -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Potassium Borate -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology:
No information found
Teratogenicity:
No information found
Reproductive:
No information found
Neurotoxicity:
No information found
Mutagenicity:
No information found
Other:
Not available

Section 12 - Ecological Information

Other:
Section 13 - Disposal Considerations
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.
USEPA 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
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

USA RQ: CAS# 1310-58-3: 1000 lb final RQ; 454 kg final RQ
Section 15 - Regulatory Information

US Federal
TSCA

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CAS# 584-08-7 is listed on the TSCA Inventory.
CAS# 1310-58-3 is listed on the TSCA Inventory.
CAS# 6381-92-6 is not on the TSCA Inventory because it is a hydrate.
It is considered to be listed if the CAS number for the anhydrous form in on the TSCA Inventory.
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 12228-88-5 is not on the TSCA Inventory because it is a hydrate.
It is considered to be listed if the CAS number for the anhydrous form in on the 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# 1310-58-3: 1000 lb final RQ; 454 kg final RQ
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPO.

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:
STATE
Potassium carbonate is not present on state lists from CA, PA, MN, MA, FL, or NJ.
Potassium hydroxide can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

Disodium ethylenediaminetetraacetate dihydrate is not present on state lists from CA, PA, MN, MA, FL, or NJ.
Water is not present on state lists from CA, PA, MN, MA, FL, or NJ.
Potassium Borate 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:
S 24/25 Avoid contact with skin and eyes.

WCK (Water Danger/Protection)
CAS# 584-08-7: 1
CAS# 1310-58-3: 1
CAS# 6381-92-6: 2
CAS# 7732-18-5: Not available
CAS# 12228-88-5: Not available

Canada
CAS# 584-08-7 is listed on Canada's DSL List
CAS# 1310-58-3 is listed on Canada's DSL List
CAS# 6381-92-6 is listed on Canada's DSL List
CAS# 7732-18-5 is listed on Canada's DSL List
Canadian WHMIS Classifications: 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.

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# 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.
CAS# 12228-88-5 is not listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date:
2/24/1999
Revision #4 Date
8/12/2004

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

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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.

Buffer Solution pH 7.0 (Color-Coded Yellow)
58235 - (KIT)
41138 - (individual)

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Buffer Solution pH 7.0 (Color-Coded Yellow)
SB105, SB105, SB105, SB105, SB105, SB105, SB105, SB105

Synonyms:
None.

Company Identification: Fisher Diagnostics
Fisher Scientific Company LLC
8365 Valley Pike
Middletown, VA 22645-0307

For information, call: 800-528-0494

Emergency Number: 800-524-0294

For CHEMTREC assistance, call: 800-424-9300

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

Section 2 - Composition, Information on Ingredients

CAS#: 1310-73-2
Chemical Name: Sodium hydroxide
%: 0.1
EINECS#: 215-185-5
Hazard Symbols: C
Risk Phrases: 35

CAS#: 1934-21-0
Chemical Name: FD&C Yellow 5
%: 0.0-0.02
EINECS#: 217-699-5
Hazard Symbols:
Risk Phrases:

CAS#: 7732-18-5
Chemical Name: Water
%: 99.18
EINECS#: 231-791-2
Hazard Symbols:
Risk Phrases:

CAS#: 7778-77-0
Chemical Name: Potassium phosphate monobasic
%: 0.7
EINECS#: 231-913-4
Hazard Symbols:
Risk Phrases:

Text for R-phrases: see Section 16

Hazard Symbols:

None listed

Risk Phrases:

None listed

Section 3 - Hazard's Identification
EMERGENCY OVERVIEW

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 mild eye irritation.

Skin:

Non-irritating to the skin. 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:

Gently lift eyelids and flush continuously with water. If irritation develops, get medical aid.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if

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irritation develops or persists.

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 and move to fresh air immediately. If not breathing, give artificial respiration. 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. Substance is noncombustible.

Extinguishing Media:

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

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

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 - Handling and Storage

Handling:

Wash hands before eating. Avoid contact with eyes. Keep container tightly closed. Use with adequate ventilation.

Storage:

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

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Good general ventilation should be sufficient to control airborne levels. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|-------------------------------|-----------------|---------------|-------------------|
| Sodium hydroxide | 2 mg/m3 Ceiling | 10 mg/m3 IDLH | 2 mg/m3 TWA |
| FD&C Yellow 5 | none listed | none listed | none listed |
| Water | none listed | none listed | none listed |
| Potassium phosphate monobasic | none listed | none listed | none listed |

OSHA Vacated PELs:

Sodium hydroxide:

None listed

FD&C Yellow 5:

None listed

Water:

None listed

Potassium phosphate monobasic:

None listed

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:

Protective garments not normally required.

Clothing:

Protective garments not normally required.

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

Color:

yellow

Odor:

odorless

pH:

7.00 @ 25C

Vapor Pressure:

760 mm Hg @ 20C

Vapor Density:

Not available

Evaporation Rate:

Not available

Viscosity:

Not available

Boiling Point:

212 deg F (100.00&C)

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