



Material Safety Data Sheet
Buffer Concentrate pH 11.0

MSDS# 03494

Section 1 - Chemical Product and Company Identification

MSDS Name: Buffer Concentrate pH 11.0
Catalog Numbers: SB142-500
Synonyms: None

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases:
CAS#: 56-40-6
Chemical Name: Glycine
%: 3.8
EINECS#: 200-272-2
Hazard Symbols:

Risk Phrases:
CAS#: 139-33-3
Chemical Name: Disodium ethylenediaminetetraacetate anhydrous
%: 1.1
EINECS#: 205-358-3
Hazard Symbols:

Risk Phrases: 35
CAS#: 1310-73-2
Chemical Name: Sodium hydroxide
%: 2.1
EINECS#: 215-185-5
Hazard Symbols: C

Risk Phrases:
CAS#: 7647-14-5
Chemical Name: Sodium chloride
%: 3.0
EINECS#: 231-598-3
Hazard Symbols:

Risk Phrases:

CAS#: 7732-18-5
Chemical Name: Water
%: 90.0
EINECS#: 231-791-2
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

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. May cause gastric disturbances and electrolytic imbalance.
Inhalation: May cause respiratory tract irritation.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.
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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.
Extinguishing Media: Use water fog, dry chemical, carbon dioxide, or regular foam.
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.
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up

Spills/Leaks: spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep container closed when not in use.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Glycine	none listed	none listed	none listed
Disodium ethylenediaminetetraacetate anhydrous	none listed	none listed	none listed
Sodium hydroxide	2 mg/m3 Ceiling	10 mg/m3 IDLH	2 mg/m3 TWA
Sodium chloride	none listed	none listed	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: Glycine: None listed Disodium ethylenediaminetetraacetate anhydrous: None listed Sodium hydroxide: None listed Sodium chloride: None listed Water: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

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

Physical State: Liquid

Color: clear, colorless

Odor: none reported

pH: 11

Vapor Pressure: 14 mm Hg

Vapor Density: 0.7

Evaporation Rate: >1 (ether=1)

Viscosity: Not available

Boiling Point: 100 deg C (212.00°F)

Freezing/Melting Point: 0 deg C (32.00°F)

Decomposition Temperature: Not available

Solubility in water: Soluble in water.

Specific Gravity/Density: 1-1.13

Molecular Formula: mixture.

Molecular Weight: 0

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	None reported, excess heat.
Incompatibilities with Other Materials	Strong oxidizing agents.
Hazardous Decomposition Products	None.
Hazardous Polymerization	Has not been reported.

Section 11 - Toxicological Information

	CAS# 56-40-6: MB7600000
	CAS# 139-33-3: AH4375000
RTECS#:	CAS# 1310-73-2: WB4900000
	CAS# 7647-14-5: VZ4725000
	CAS# 7732-18-5: ZC0110000
	RTECS:
	CAS# 56-40-6: Oral, mouse: LD50 = 4920 mg/kg;
	Oral, rat: LD50 = 7930 mg/kg;
	.
	RTECS:
	CAS# 139-33-3: Oral, mouse: LD50 = 2050 mg/kg;
	Oral, rabbit: LD50 = 2300 mg/kg;
	Oral, rat: LD50 = 2 gm/kg;
	.
	RTECS:
	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;
LD50/LC50:	Draize test, rabbit, skin: 500 mg/24H Severe;
	.
	RTECS:
	CAS# 7647-14-5: Draize test, rabbit, eye: 100 mg Mild;
	Draize test, rabbit, eye: 100 mg/24H Moderate;
	Draize test, rabbit, eye: 10 mg Moderate;
	Draize test, rabbit, skin: 50 mg/24H Mild;
	Draize test, rabbit, skin: 500 mg/24H Mild;
	Inhalation, rat: LC50 = >42 gm/m3/1H;
	Oral, mouse: LD50 = 4 gm/kg;
	Oral, rat: LD50 = 3000 mg/kg;
	Skin, rabbit: LD50 = >10 gm/kg;
	.
	RTECS:
	CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;
	.
	Glycine - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
	Disodium ethylenediaminetetraacetate anhydrous - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:	Sodium hydroxide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
	Sodium chloride - 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.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not 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 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# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

Section 15 - Regulatory Information

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.

WGK (Water Danger/Protection)

CAS# 56-40-6: 0

CAS# 139-33-3: 2

CAS# 1310-73-2: 1

CAS# 7647-14-5: 0

CAS# 7732-18-5: Not available

Canada

CAS# 56-40-6 is listed on Canada's DSL List

CAS# 139-33-3 is listed on Canada's DSL List

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

CAS# 7647-14-5 is listed on Canada's DSL List

CAS# 7732-18-5 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# 56-40-6 is not listed on Canada's Ingredient Disclosure List.

CAS# 139-33-3 is not listed on Canada's Ingredient Disclosure List.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List

CAS# 7647-14-5 is not listed on Canada's Ingredient Disclosure List.

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

US Federal

TSCA

CAS# 56-40-6 is listed on the TSCA Inventory.

CAS# 139-33-3 is listed on the TSCA Inventory.

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

CAS# 7647-14-5 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

Section 16 - Other Information

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 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.
