according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.18.2015

Buffer Solution pH 12.00

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Buffer Solution pH 12.00

Manufacturer/Supplier Article number: S25208K

Recommended uses of the product and restrictions on use: Laboratory Chemicals

Manufacturer Details:

AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291

Supplier Details:

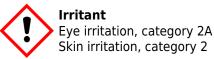
Fisher Science Education 6771 Silver Crest Road, Nazareth, PA 18064 800 955-1177

Emergency telephone number:

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:



Eye. Irrit 2A. Skin. Irrit 2.

Signal word: Warning

Hazard statements:

Causes skin irritation. Causes serious eye irritation.

Precautionary statements:

If medical advice is needed have product container or label at hand. Keep out of reach of children. Read label before use. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with soap and water. Specific treatment (see supplemental first aid instructions on this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

If eye irritation persists get medical advice/attention.

Other Non-GHS Classification: None

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.18.2015

Buffer Solution pH 12.00

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:				
CAS 7732-18-5	Deionized Water	>99.18 %		
CAS 1310-73-2	Sodium Hydroxide	<0.11 %		
CAS 7558-79-4	Sodium Phosphate	<0.71 %		
		Percentages are by weight		

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Immediately seek medical attention.

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately seek medical attention.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. Vomiting. Diarrhea. Rash. Cramps.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.18.2015

Buffer Solution pH 12.00

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyeware, gloves, and clothing. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Absorb with inert material. Refer to Section 8.

Reference to other sections: None

SECTION 7: Handling and storage

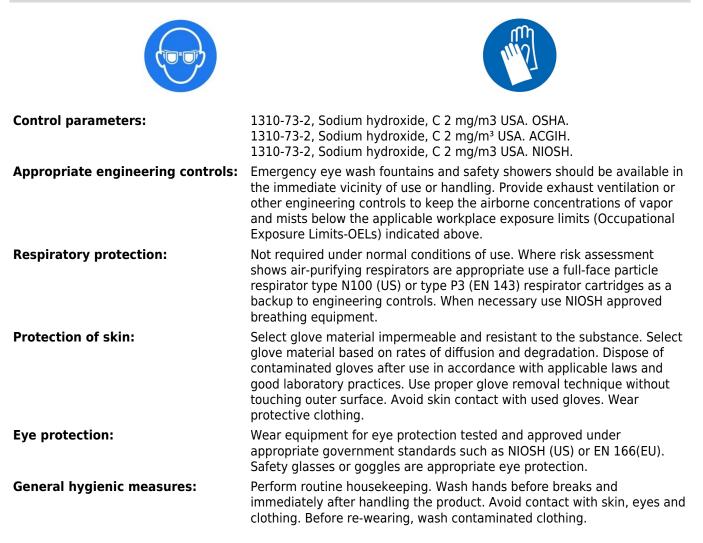
Precautions for safe handling:

Avoid contact with skin, eyes and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection



according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.18.2015

Buffer Solution pH 12.00

SECTION 9: Physical and chemical properties

Appearance (physical state, color):		Explosion limit lower: Explosion limit upper:	Not applicable Not applicable
Odor:	Odorless	Vapor pressure at 20°C:	2.3 kPa (at 20°C) or 23 hPa (17 mmHg) at 20°C (68°F)
Odor threshold:	Not determined	Vapor density:	0.62 (Air = 1)
pH-value:	12.0	Relative density:	1 (Water = 1)
Melting/Freezing point:	0 °C (32 °F)	Solubilities:	Soluble in water.
Boiling point/Boiling range:	100°C (212°F)	Partition coefficient (n- octanol/water):	Not determined
Flash point (closed cup):	Not applicable	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not applicable	Viscosity:	a. Kinematic: Not determined b. Dynamic: 0.952 mPas at 20°C (68°F)
Density at 20°C:	1 g/cm ³ (8.345 lbs./gal) at 20°C (68°F)		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials.

Incompatible materials:

Metals, acids, aluminum, nitro compounds, zinc, tin, halogenated hydrocarbons, nitromethane, and flammable liquids.

Hazardous decomposition products:

Sodium oxides.

SECTION 11: Toxicological information

Acute Toxicity: No additional information. Chronic Toxicity: No additional information. Skin corrosion/irritation:

Skin - Rabbit Result: Causes severe burns. - 24 h 1310-73-2.

Skin - rabbit Result: Mild skin irritation - 24 h 7558-79-4.

Serious eye damage/irritation:

Eyes - Rabbit Result: Corrosive - 24 h 1310-73-2.

Eyes - rabbit Result: Mild eye irritation - 24 h 7558-79-4.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.18.2015

Buffer Solution pH 12.00

Respiratory or skin sensitization: No additional information. **Carcinogenicity**: No additional information.

Germ cell mutagenicity: No additional information. Reproductive Toxicity: No additional information. STOT-single and repeated exposure: No additional information. Additional toxicological information: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

1310-73-2, LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h. 1310-73-2, LC50 - Oncorhynchus mykiss (rainbow trout) - 45.4 mg/l - 96 h. 1310-73-2, Immobilization EC50 - Daphnia (water flea) - 40.38 mg/l - 48 h.

Persistence and degradability: No additional information.
Bioaccumulative potential: No additional information.
Mobility in soil: No additional information.
Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dilute with water.

SECTION 14: Transport information

US DOT

UN Number: ADR, ADN, DOT, IMDG, IATA

Limited Quantity Exception:

Bulk: RQ (if applicable): None Proper shipping Name: Not Regulated. Hazard Class: None Packing Group: Not Regulated. Marine Pollutant (if applicable): No additional information. Comments: None Not Regulated

None

Non Bulk: RQ (if applicable): None Proper shipping Name: Not Regulated. Hazard Class: None Packing Group: Not Regulated. Marine Pollutant (if applicable): No additional information. Comments: None

SECTION 15: Regulatory information

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.18.2015

Buffer Solution pH 12.00

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7558-79-4 Sodium phosphate 5000 lbs. 1310-73-2 Sodium hydroxide 1000 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0 HMIS: 1-0-0 GHS Full Text Phrases: None

Abbreviations and Acronyms: None