

Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2015

Hardness Buffer Solution

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

Product name: Hardness Buffer Solution

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: FTR2-A

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fremont Industries, Inc.
4400 Valley Industrial Blvd. N., Shakopee, MN 55379
(952) 445-4121

Emergency telephone number:

Emergency Telephone (800) 255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:



Irritant

Eye irritation, category 2A
Skin irritation, category 2

Chronic aquatic hazard, category 3

Signal word: Warning

Hazard statements:

Causes serious eye irritation.
Causes skin irritation.
Harmful to aquatic life with long lasting effects.

Precautionary statements:

Read label before use.
Wash skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
IF ON SKIN: Wash with soap and water.
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

SECTION 3: Composition/information on ingredients

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Ingredients:

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CAS 124-68-5	Aminomethylpropanol	<50 %
CAS 64-19-7	Acetic Acid	<10 %
CAS 142-72-3	Magnesium acetate	<1 %
CAS 7732-18-5	DemineralizedWater	35-45 %
CAS 14402-88-1	Ethylenediaminetetraacetic Acid, Magnesium Disodium Salt	<1 %
Percentages are by weight		

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed to fresh air. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if discomfort or irritation persists.

After skin contact:

Continue rinsing while removing contaminated clothing and shoes. Wash hands and exposed skin with soap and plenty of water. Seek medical assistance.

After eye contact:

Protect unexposed eye. Immediately rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Seek medical assistance if discomfort or irritation persists.

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation.

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:

May react violently with strong oxidizers.

Advice for firefighters:

Protective equipment:

Wear protective eyewear, 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.

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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:

Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eyewear, 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.

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. Do not mix with bases. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. 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



Control parameters:

142-72-3, Magnesium acetate, PEL 15 mg/m³ as inhalable dust, 5 mg/m³ as respirable dust.
64-19-7, Acetic acid, ACGIH PEL 10 ppm (25 mg/m³).
64-19-7, Acetic acid, OSHA TLV 10 ppm (25 mg/m³).
142-72-3, Magnesium acetate, TLV 10 mg/m³ as inhalable dust, 3 mg/m³ as respirable dust.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

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Eye protection: Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before re-wearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, yellow liquid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Vinegar	Vapor pressure at 20°C:	23 mmHg at 25°C (77°F)
Odor threshold:	Not determined	Vapor density:	0.6 (Air =1)
pH-value:	10.0	Relative density:	Not determined 1.033
Melting/Freezing point:	-16°C (3°F)	Solubilities:	Soluble in water.; Soluble in acid.
Boiling point/Boiling range:	104.5°C (220°F)	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	>97.2 °C (>207°F) Closed cup	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	0.97 (Water = 1)	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

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:

Extreme temperatures.

Incompatible materials:

Oxidizers.

Hazardous decomposition products:

Toxic fumes of nitrogen oxides, carbon dioxide, carbon monoxide.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

LD50 = 5566 mg/kg (Rat).

Dermal:

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LD50 = 3839 mg/kg (Rabbit).

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

Irritating to skin.

Serious eye damage/irritation:

Irritating to eyes.

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:

Toxicity to fish 96 hr Pleuronectes platessa LC50 = 184 mg/L, Aminomethylpropanol (124-68-5).

Toxicity to daphnia 48 hr Daphnia magna EC50 = 193 mg/L, Aminomethylpropanol (124-68-5).

24 hr Daphnia magna EC50 = 65 mg/L, Aminomethylpropanol (124-68-5).

72 hr Scenedesmus subspicatus EC50 = 520 mg/L, Aminomethylpropanol (124-68-5).

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:

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. Neutralize with dilute acid solutions. Wash mixture down the drain with large quantities of water.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Regulated

Limited Quantity Exception:

None

Bulk:

Non Bulk:

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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

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Comments: None

SECTION 15: Regulatory information

United States (USA)

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

Acute

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):

64-19-7 Acetic acid 5000 lb.

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

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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: 2-1-0

HMIS: 2-1-0

GHS Full Text Phrases: None

Abbreviations and Acronyms: None