

BUFFER, REFERENCE STANDARDS, pH 1.68 - 2.27

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification					
Catalog Number:					
1492, 1493, 1493.5, B-240, B-245, B017420, B017440, R1492500, SB017420, SB017440					
Product Identity: BUFFER, REFERENCE STANDARDS, pH 1.68 - 2.27					
Manufacturer's Name:	Emergency Contact(24 hr) CHEMTREC®				
RICCA CHEMICAL COMPANY LLC	Domestic: 800-424-9300				
	International: 703-527-3887				
CAGE Code: 4TCW6, 0V553, 4XZQ2					
Address:	Telephone Number For Information:				
448 West Fork Dr Arlington, TX 76012	817-461-5601				
Date Prepared: 8/10/99	Revision: 5				
	Last Revised: 06/17/2009				
	Date Printed: 09/06/2011 11:58:09 am				

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Potassium Chloride	7447-40-7	<1	Not Available	Not Available
			Not Available	Not Available
Hydrochloric Acid	7647-01-0	<1	C 5 ppm	C 5 ppm
			C 7.5 mg/m3	C 7 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available	Not Available
			Not Available	Not Available

Section 3: Hazard Identification

Emergency Overview: Non-corrosive, non-flammable, non-toxic. Wash areas of contact with water. Does not present any significant health hazards.

Target Organs: eyes, skin

Eye Contact: May cause slight irritation.

Inhalation: Not likely to be hazardous by inhalation.

Skin Contact: May cause slight irritation.

Ingestion: May cause nausea, vomiting, and diarrhea.

Chronic Effects/Carcinogenicity: None

IARC - Hydrochloric Acid is unclassifiable as to carcinogenicity to humans. Hydrochloric Acid is unclassifiable as to carcinogenicity to humans. NTP - No.

OSHA - No.



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Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Hydrochloric Acid. Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Hydrochloric Acid. Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Hydrochloric Acid. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Hydrochloric Acid. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Hydrochloric Acid.

Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Skin Contact: Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.
Ingestion: Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

Section 5: Fire Fighting Measures

 Flash Point: Not Available.
 Method Used: Not Available.

 LFL: Not Available.
 UFL: Not Available.

 Extinguishing Media: Use any means suitable for extinguishing surrounding fire (water or water spray). Neutralize with soda ash or slaked lime.

 Fire & Explosion Hazards: Not considered to be a fire or explosion hazard. May react with metals to release flammable Hydrogen gas.

 Fire Fighting Instructions: Use normal procedures/instructions.

 Fire Fighting Equipment: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always dispose of in accordance with local regulations.

Section 7. Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. **Safety Storage Code:** General

Section 8: Exposure Control/Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.
Respiratory Protection: Normal room ventilation is adequate.
Skin Protection: Chemical resistant gloves.
Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Clear, colorless liquid Odor: Odorless Solubility in Water: Infinite Specific Gravity: Approximately 1 pH: 1.68-2.27 Boiling Point(°C): Approximately 100 Melting Point(°C): Approximately 0 Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage. Incompatibility: Most metals, Alkalis, active metals, Cyanides, Sulfides, Sulfites, Metal Oxides, formaldehyde. Hazardous Decomposition Products: Fumes of Hydrogen Chloride and Hydrogen in contact with metals, Chlorine gas from Oxidizers. Hazardous Polymerization: Will not occur.



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MSDS

Section 11. Toxicological Information

LD50, Oral, Rabbit (Hydrochloric Acid) 900 mg/kg; LD50, Oral, Rat (Potassium Chloride) 2600 mg/kg, details of toxic effects not reported other than lethal dose value. LCLo, inhalation, human: (Hydrochloric Acid) 3000 ppm/5 minutes: No toxic effects noted.

Section 12. Ecological Information

Ecotoxicological Information: Hydrogen Chloride has slight acute and chronic toxicity to aquatic life.

Chemical Fate Information: Virtually 100% of Hydrogen Chloride will eventually end up in the air.

Section 13. Disposal Considerations

Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers:

This product is not regulated.

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:

Section 302 Extremely Hazardous Substances:Not Applicable.

Section 311/312 Hazardous Catagories:No

Section 313 Toxic Chemicals:Not Applicable.

California: None Reported.

Pennsylvania: Hydrochloric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List. Hydrochloric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Hydrochloric Acid - 5,000 pounds. Hydrochloric Acid - 5,000 pounds.

WHMIS: Not Applicable.

Section 16. Other Information

NFPA Ratings: Health: 1

Flammability: 0

nmability: 0

Reactivity: 0

Special Notice Key:None

HMIS Ratings:

Health: 1

Flammability: 0

Reactivity: 0

Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 9-18-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300; (Section 2) revised exposure limits from mg/m3 to ppm; (Section 3) added mutation data citation for Potassium Chloride.

Rev 2, 10-09-2001: Reformatted to electronic data format.

Rev 3, 07-29-2003: (Section 1) added Solutions Plus catalog numbers B017420 and B017440.

Rev 4, 02-02-2006: (Section 1) added catalog number R1492500.

Rev 5, 06-17-2009: reviewed and approved



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When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.