RICCA CHEMICAL COMPANY

MSDS

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number:

ABA1KN, M5BANIN0, MSBA1KN, PBA1KN, S1014000, S1016000

Product Identity:
BARIUM AA, ICP, ICP-MS STANDARDS, 1000 ppm Ba in dilute Nitric Acid

Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	**Emergency Contact(24 hr) --** CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887
CAGE Code: 0V553	
Address: 448 West Fork Dr Arlington, TX 76012	**Telephone Number For Information:** 817-461-5601
Date Prepared: 1/14/05	**Revision:** 1 Last Revised: 11/09/2005 Date Printed: 08/31/2006 1:30:26 pm

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Barium Nitrate	10022-31-8	0.1 - 0.3	Not Available 0.5 mg/m3	Not Available 0.5 mg/m3
Nitric Acid	7697-37-2	2 - 4	2 ppm 5.2 mg/m3	2 ppm 5 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available Not Available	Not Available Not Available

Section 3: Hazard Identification

Emergency Overview: Mildly corrosive liquid. Avoid contact with skin, eyes, and clothing. May cause mild irritation. If swallowed, do not induce vomiting. Dilute with water and call a physician. Wash areas of contact with plenty of water. Water and stomach acids solubilize Barium salts and can cause poisoning. Hazards are greatly reduced due to the low level of Barium salts in these solutions.

Target Organs: eyes, skin, respiratory system, teeth, central nervous system, heart.

Eye Contact: May cause irritation, redness, pain, and tearing.

Inhalation: May cause mild irritation of the nose, throat, and respiratory tract.

Skin Contact: May cause irritation and temporary discoloration of skin.

Ingestion: Mildly corrosive. May cause irritation of the gastrointestinal tract. Water and stomach acids solubilize barium salts and can cause poisoning.

Chronic Effects/Carcinogenicity: None

IARC - No.

NTP - No.

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Nitric Acid.

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

Fire & Explosion Hazards: Not combustible, but substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Can react with metals to release flammable hydrogen gas. May react explosively with combustible organic or readily oxidizable materials such as: alcohols, turpentine, charcoal, organic refuse, metal powder, hydrogen sulfide, etc.

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

Absorb with suitable material and 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: Not Available.

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: Strong bases, metallic powders, Carbides, Hydrogen Sulfide, Turpentine and combustible organics.

Hazardous Decomposition Products: Emits highly toxic fumes of Nitrogen Oxides and Hydrogen Nitrate when heated to decomposition.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LDLo, Oral, Human: 430 mg/kg (Nitric Acid), details of toxic effects not reported other than lethal dose value. LD50, Oral, Rat: 355 mg/kg (Barium Nitrate), details of toxic effects not reported other than lethal dose value.

Section 12. Ecological Information

Ecotoxicological Information: Barium and its salts have moderate acute and chronic toxicity to aquatic life.
Chemical Fate Information: This material may bioaccumulate to some extent. Barium Nitrate is highly persistent in water, with a half-life greater than 200 days.

Section 13. Disposal Considerations

Neutralize with Soda Ash or Sodium Carbonate. Wash resulting solution down the drain. Treat the solid residue as normal refuse. If not allowed, containerize for disposal with an approved waste disposal facility. 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: These items 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: Acute, Chronic: Yes Fire, Pressure, Reactivity: No
Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

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

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: Nitric Acid - 1,000 pounds.

WHMIS: E: Corrosive Material.

Section 16. Other Information

NFPA Ratings:

Health: 1	Flammability: 0	Reactivity: 0	Special Notice Key:None

HMIS Ratings:

Health: 1	Flammability: 0	Reactivity: 0	Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 11-09-2005: (Section 1) added internal part number M5BANIN0; (Section 3) added teeth, central nervous system and heart to target organs; (Section 11) added WHMIS information.

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.