

Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number: 4401, 4406, M4LICAN0, PLI10KN, S5312B00	
Product Identity: LITHIUM ICP STANDARDS, 1000 - 10,000 ppm Li in 5% Nitric Acid	
Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	Emergency Contact(24 hr) -- CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887
CAGE Code: 4TCW6	
Address: 448 West Fork Dr Arlington, TX 76012	Telephone Number For Information: 817-461-5601
Date Prepared: 10/2/00	Revision: 4 Last Revised: 03/09/2007 Date Printed: 10/16/2007 11:32:52 am

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Lithium Carbonate	554-13-2	0.5 - 5.5	Not Available	Not Available
			Not Available	Not Available
Nitric Acid	7697-37-2	4.5 - 5.5	2 ppm	2 ppm
			5.2 mg/m3	5 mg/m3
Water, Deionized	7732-18-5	Balance	Not Available	Not Available
			Not Available	Not Available

Section 3: Hazard Identification

Emergency Overview: Corrosive Liquid. Avoid contact with skin, eyes, and clothing. Avoid breathing vapor. If swallowed, do not induce vomiting. Dilute with water and call a physician. Wash areas of contact with plenty of water. Potential symptoms of overexposure are irritation of the eyes, mucous membranes and skin, dental erosion, bronchitis, pneumonitis, delayed pulmonary edema. Contains a material known by the state of California to cause developmental toxicity.

Target Organs: eyes, skin, respiratory system, teeth.

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

Inhalation: May cause irritation of the nose, throat, and respiratory tract. Prolonged exposure to vapors of Nitric Acid may lead to pneumonia or pulmonary edema.

Skin Contact: May cause irritation, redness and pain. Contact will discolor skin yellow-brown depending on exposure which will wear off after a period of time.

Ingestion: Corrosive. May cause immediate pain and burns of the mouth, throat, esophagus and gastrointestinal tract.

Chronic Effects/Carcinogenicity: None

IARC - No.

MSDS

LITHIUM ICP STANDARDS, 1000 - 10,000 ppm Li in 5% Nitric Acid

NTP - No.

OSHA - No.

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

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

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.

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: Corrosive

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.

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: 525 mg/kg (Lithium Carbonate), behavioral, respiratory and gastrointestinal effects noted. Lithium Carbonate is investigated as a tumorigen.

Section 12. Ecological Information

Ecotoxicological Information: No information found.

Chemical Fate Information: No information found.

Section 13. Disposal Considerations

Neutralize with Soda Ash or Calcium Carbonate. Wash resulting solution down the drain. Treat the solid residue as normal refuse. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers: PLI10KN-100, PLI10KN-500, S5312B00-100N, S5312B00-250N, S5312B00-500N

D.O.T. Shipping Name: Corrosive Liquid, Acidic, Inorganic, n.o.s., (Nitric Acid)

D.O.T. Hazard Class: 8

U.N. / N.A. Number: UN3264

Packing Group: III

D.O.T. Label: 8



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 Categories: Acute, Chronic: Yes Fire, Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: Contains an ingredient (Lithium Carbonate) known to the state of California to cause developmental toxicity.

Pennsylvania: Nitric Acid 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.

MSDS

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WHMIS: E: Corrosive Material.



Section 16. Other Information

NFPA Ratings:

Health: 2 Flammability: 0 Reactivity: 0 Special Notice Key:None

HMIS Ratings:

Health: 2 Flammability: 0 Reactivity: 0 Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 10-09-2001: Reformatted to electronic data format.

Rev 2, 02-13-2003: (Sections 3 and 15) updated California Proposition 65 information.

Rev 3, 02-04-2005: (Section 1) added catalog number PLI10KN and SpectroPure catalog number S5312B00.

Rev 4, 03-09-2007: (Section 1) added internal part number M4LICAN0.

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.

