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SAFETY DATA SHEET

Section 1. Identification

Product Name: Lithium azide solution – 20% weight in H_2O

Product Type: Liquid

CAS Number: 19597-69-4

Product Number: LI7694

Product Manufacturer: Ereztech LLC
11555 Medlock Bridge Road, Suite 100
Johns Creek, GA 30097

Product Information: (888) 658-1221

In case of an emergency: (888) 658-1221 (for spill, leak, fire or exposure)
*** Contact manufacturer for all non-emergency calls.

Section 2. Hazards Identification

Emergency Overview

Appearance/Odor: Clear, colorless liquid, odor not determined.

Classification: ACUTE TOXICITY; ORAL - Category 2, H300
ACUTE TOXICITY; DERMAL – Category 3, H311
ACUTE TOXICITY; INHALATION – Category 1, H330

GHS label elements

Signal word: DANGER

Hazard statements: H300: Fatal if swallowed.
H311: Toxic in contact with skin.
H330: Fatal if inhaled.

Hazard pictograms:

Precautionary statements

Prevention: P260: Do not breathe dust/fumes/gases/mists/vapors/sprays.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.

Section 2. Hazards Identification

Prevention (cont.):
P260: Do not breathe dust/fumes/gases/mists/vapors/sprays.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.

Response:
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310: IF INHALED: Immediately call a POISON CENTER or doctor/physician.
P312: IF ON SKIN: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.
P361 + P363: Take off immediately all contaminated clothing. Wash before reuse.

Storage:
P403 + P233: Store in a well ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal:
P501: Dispose of contents/ container to an approved wasted disposal plant.

General:
None.

OSHA/HCS status:
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified:
Rapidly absorbed through skin. Contact with acids liberates very toxic gas.

Section 3. Composition/Information on Ingredients

Substances

Formula : LiN_3
Molecular weight : 48.96 g/mol
CAS-No. : 19597-69-4
EC-No. : 243-177-1

Ingredient Name	%	CAS Number
Lithium azide solution – 20% wt. in H_2O	20	19597-69-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of Necessary First Aid Measures

General Advice: Move out of dangerous area. Do not breathe fumes/gases/mists/vapors/spray. Do not get in eyes, on skin, or on clothing. Call a POISON CENTER or doctor/physician immediately. Show this safety data sheet to the doctor in attendance.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue rinsing. Get immediate medical attention.

Skin Contact: Immediately remove shoes and all contaminated clothing. Wash off contaminated skin with soap and plenty of water. Call a POISON CENTER or doctor/physician immediately.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Call a POISON CENTER or doctor/physician immediately. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Use a barrier to give mouth to mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion: Call a physician or POISON CONTROL CENTER immediately. Rinse mouth. Do NOT induce vomiting. Remove dentures if any. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most Important Symptoms/Effects, Acute And Delayed Potential Acute Health Effects

General: For extended information, reference Section 11 / Additional Information.

Eye Contact: No additional information available.

Inhalation: Product is fatal if inhaled.

Skin Contact: Product is toxic in contact with skin.

Ingestion: Product is fatal if ingested.

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician: Treat symptomatically.

Specific Treatments: No specific treatment.

Protection of First Responders: No action taken shall be taken involving any personal risk without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire Fighting Measures

General Hazards: Product does not burn but thermal decomposition of product may produce toxic gases.

Suitable Extinguishing Media: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide (CO_2).

Unsuitable Extinguishing Media: None.

Unusual Fire and Explosion Hazards: If involved in a fire, toxic gases may be released when product is exposed to elevated temperatures or flames.

Product of Combustion: Decomposition products may include nitrogen oxides (NO_x) and lithium oxides.

Protection of Firefighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Fire-fighters should wear appropriate protection equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode. Avoid contact with skin and eyes. Do not breathe dust.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-emergency Personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid physical contact with product. Avoid inhalation of vapors, mists or gases. Provide adequate ventilation. Wear respiratory protection. Put on appropriate personal protective equipment.

For Emergency Responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental Precautions: Do not allow dispersal of spilled material and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for Containment

Small Spill: Absorb with an inert dry binding material (sand, diatomite, acid binders, universal binders) and place in an appropriate waste disposal container. Do not flush with water. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental Release Measures

Large Spill: Contain and collect spillage using a dry, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in dry container for disposal according to local regulations (see Section 13). Do not flush with water. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions: Avoid all contact with skin, eyes and clothing. Avoid the formation of aerosols and the inhalation of vapors, mists and gases. Do not ingest. Provide adequate ventilation.

Protective Measures: Put on appropriate personal protective equipment (see Section 8). Keep in the original container kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

General Occupational Hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Safe Storage Conditions: Store in original container in a dry, cool and well-ventilated area, away from incompatible materials (acids) and food and drink. Keep container tightly closed and sealed until ready for use. Store locked up.

Section 8. Exposure Controls/Personal Protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and conduct regular repairs. Waste from these procedures should be handled in accordance with Section 13.

Occupational Exposure Limits: Contains no substances with occupational exposure limit values.

Section 8. Exposure Controls/Personal Protection

Engineering Controls: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Provide an eyewash/shower station.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual Protection Measures

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Remove all soiled and contaminated clothing immediately. Do not inhale vapors or aerosols. Avoid contact with eyes and skin. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or gases. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles, faceshield (8-inch minimum). Refer to 29 CFR 1910.133, ANSI Z87.1, or European Standard EN166.

Skin Protection

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical-resistant gloves.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Section 8. Exposure Controls/Personal Protection

Hand Protection (cont.): Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. For full contact, wear gloves made from Neoprene or nitrile rubber.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State: Liquid.

Color: Colorless.

Odor: No data available.

Odor Threshold: No data available.

pH: No data available.

Melting Point: No data available.

Boiling Point: 103 °C (217.4 °F) @ 760 mmHg

Flash Point: No data available.

Auto-ignition temperature: No data available.

Density: 1.088 gm/L at 25 °C (77 °F).

Water Solubility: No data available.

Section 10. Stability and Reactivity

Reactivity: No additional data available.

Chemical Stability: Stable at normal ambient temperature and pressure and under recommended storage conditions.

Conditions to Avoid: No additional data available.

Incompatible Materials: Acids, acid chlorides, chlorinated solvents, halogenated compounds, metals, Dimethyl sulfoxide (DMSO).

Section 10. Stability and Reactivity

Hazardous Decomposition Products: Nitrogen oxides, lithium oxides.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity : No specific data available.

Irritation/Corrosion : No specific data available.

Sensitization : No specific data available.

Germ Cell Mutagenicity : No effects known.

Carcinogenity

IARC : No component of this product present at levels greater than 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH : No component of this product present at levels greater than 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP : No component of this product present at levels greater than 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA : No component of this product present at levels greater than 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity : This product is not expected to cause reproductive or developmental effects.

Teratogenicity : No specific data available.

Specific Target Organ Toxicity (single exposure) : No specific data available.

Specific Target Organ Toxicity (repeated exposure) : No specific data available.

Aspiration Hazard : No specific data available.

Information on the likely routes of exposure : No specific data available.

Additional Information : Exposure to product may produce nausea, headaches and vomiting. Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported.

Section 11. Toxicological Information

Additional Information (cont.) : Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor, clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion. Stomach irregularities have been noted based on human evidence (Lithium triazide).

Section 12. Ecological Information

Numerical Measures of Toxicity : No specific data available.

Persistence and Degradability

Biodegradability : No specific data available.

Bioaccumulative potential : No specific data available.

Mobility in soil : No specific data available.

Other Adverse Effects : This substance may be hazardous to the environment. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13. Disposal Considerations

Waste Treatment Methods

Product Dispose of in accordance with local, state, and federal regulations. Refer to 40 CFR 260-299 for complete waste disposal regulations. Consult your local, state, or federal agency before disposing of any chemicals.

Contaminated packaging Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Dispose of in the same manner as unused product.

Section 14. Transport Information

	DOT	IMDG	IATA
UN Number	UN 3287	UN 3287	UN 3287
UN Proper Shipping Name	Toxic liquid, inorganic, n.o.s. (Lithium triazide)	TOXIC LIQUID, INORGANIC, N.O.S. (Lithium triazide)	Toxic liquid, inorganic, n.o.s. (Lithium triazide)
Transport Hazard Classes	6.1	6.1	6.1
Packing Group	II	II	II
Environmental Hazards	No	No	No

Section 14. Transport Information

	DOT	IMDG	IATA
Additional Information	-	EMS-No: F-A, S-A	-

Special Precautions for User : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transporting in Bulk According to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Section 15. Regulatory Information

TSCA (Toxic Substance Control Act):
This product is listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory).

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard.

Massachusetts Right to Know Components
No components are subject to Massachusetts Right to Know Act.

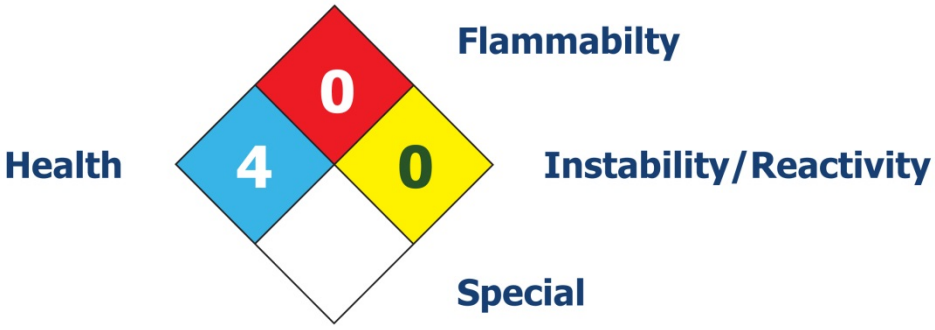
Pennsylvania Right to Know Components
No components are subject to Pennsylvania Right to Know Act.

New Jersey Right to Know Components
No components are subject to New Jersey Right to Know Act.

California Proposition 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

National Fire Protection Association (U.S.A.)



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HMIS Rating

HEALTH	4
FLAMMABILITY	0
PHYSICAL HAZARD	0

History

Date of printing	:	7/30/17
Date of issue / Date of Revision	:	7/30/17
Date of previous issue	:	None
References	:	None available

Abbreviations and Acronyms

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DOT: US Department of Transportation
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association

Section 16. Other Information

Abbreviations and Acronyms (cont.)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
IMDG: International Maritime Code for Dangerous Goods
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
SARA: Superfund Amendments and Reauthorization Act
VOC: Volatile Organic Compound

Disclaimer

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by Ereztech LLC regarding the accuracy or completeness of the information. Ereztech LLC shall not be liable for any damages resulting from the handling, or from the contact with the above product.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.