

# SAFETY DATA SHEET

Date Printed: 05/02/2024 Date Revised: 01/15/2022

## **SECTION 1. IDENTIFICATION**

Product Identifier: (2N) 99% Lithium Azide Solution

Product Code: LI-AZ-02-SOL

CAS Number: 19597-69-4

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351 Emergency telephone number: +1 800-424-9300

## **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Acute toxicity, Oral (Category 2), H300 Acute toxicity, Inhalation (Category 1), H330 Acute toxicity, Dermal (Category 3), H311

GHS Label elements, including precautionary statements Pictogram

Signal word: Danger Hazard statement(s) H300 + H330 Fatal if swallowed or if inhaled H311 Toxic in contact with skin. Precautionary statement(s) P260 Do not breathe dust/ fume/ gas/ mist/ Vapors/ spray.

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. P280 Wear protective gloves/ protective clothing. P284 Wear respiratory protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302 + P352IF 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 Immediately call a POISON CENTER or doctor/physician. P320 Specific treatment is urgent (see supplemental first aid instructions on this label). P330 Rinse mouth. P361 Remove/Take off immediately all contaminated clothing. P363 Wash contaminated clothing before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant. Hazards not otherwise classified (HNOC) or not covered by GHS Rapidly absorbed through skin. Contact with acids liberates very toxic gas.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixtures Formula: LiN3 Molecular Weight: 48.96 g/mol Hazardous components Component: Lithium triazide CAS-No. 19597-69-4 EC-No. 243-177-1 Classification Acute Tox.2; H300 + H310 + H330 Concentration 10-30%

## **SECTION 4. FIRST AID MEASURES**

Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. In case of eye contact Flush eyes with water as a precaution. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 Indication of any immediate medical attention and special treatment needed no data available

## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media Suitable extinguishing media Dry powder Special hazards arising from the substance or mixture nitrogen oxides (NOx), Lithium oxides Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary. Further information: no data available

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Wear respiratory protection. Avoid breathing Vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8. Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush with water. Keep in suitable, closed containers for disposal. Reference to other sections For disposal see section 13

#### **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of Vapor or mist. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Never allow product to get in contact with water during storage. Do not store near acids. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters** 

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties Appearance Form: liquid Odor no data available Odor Threshold no data available pH no data available Melting point/freezing point no data available Initial boiling point and boiling range no data available Flash point not applicable EVaporation rate no data available Flammability (solid, gas) no data available Upper/lower flammability or explosive limits no data available Vapor pressure no data available Vapor density no data available Relative density 1.088 g/mL at 25 ŰC (77 ŰF) Water solubility no data available Partition coefficient: n-octanol/water no data available Auto-ignition temperature no data available Decomposition temperature no data available Viscositv no data available Explosive properties no data available Oxidizing properties no data available Other safety information no data available

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity no data available Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions no data available Conditions to avoid no data available Incompatible materials Acid chlorides, Chlorinated solvents, Halogenated compounds, Metals, Acids, Dimethyl sulfoxide. (DMSO) Hazardous decomposition products Other decomposition products-no data available In the event of fire: see section 5

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity no data available Inhalation: no data available Dermal: no data available no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity no data available no data available Specific target organ toxicity -single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Additional Information **RTECS:** Not available Nausea, Headache, 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. 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 - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence (Lithium triazide)

#### SECTION 12. ECOLOGICAL INFORMATION

Toxicity

no data available Persistence and degradability no data available Bioaccumulative potential no data available Mobility in soil no data available Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted Other adverse effects no data available

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product.

## **SECTION 14. TRANSPORT INFORMATION**

DOT (US) UN number: 3287 Class: 6.1 Packing group: II Proper shipping name: Toxic liquid, inorganic, n.o.s. (Lithium triazide) Reportable Quantity (RQ): Marine pollutant: No Poison Inhalation Hazard: No

IMDG UN number: 3287 Class: 6.1 Packing group: II EMS-No: F-A, S-A Proper shipping name: TOXIC LIQUID, INORGANIC, N.O.S. (Lithium triazide) Marine pollutant: No

IATA UN number: 3287 Class: 6.1 Packing group: II Proper shipping name: Toxic liquid, inorganic, n.o.s. (Lithium triazide)

## **SECTION 15. REGULATORY INFORMATION**

**SARA 302** Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. **SARA 313** Components SARA 313: 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 the Massachusetts Right to Know Act. Pennsylvania Right To Know Components Water CAS-No. 7732-18-5 Lithium triazide 19597-69-4 New Jersey Right To Know Components CAS-No. Water 7732-18-5 Lithium triazide 19597-69-4 California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.