

MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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SECTION 1 Product Identification

CHEMICAL NAME: Lithium iodide trihydrate
CAS #: 85017-80-7
FORMULA: LiI₃H₂O
SYNONYM: Lithium monoiodide hydrate

SECTION 2 Composition and Information on Ingredients

| INGREDIENT: | CAS # | % | ACGIH (TWA) | OSHA (PEL) |
|----------------|------------|-----|-------------|------------|
| Title Compound | 85017-80-7 | 100 | no data | no data |

SECTION 3 Hazards Identification

EMERGENCY OVERVIEW: Irritating to skin, eyes and respiratory tract. Lithium salts are toxic to the central nervous system and may damage kidneys and act as a teratogen.

PRIMARY ROUTES OF EXPOSURE: Ingestion, Inhalation of dust.

EYE CONTACT: Contact with eyes causes irritation. May cause redness and pain.

SKIN CONTACT: Causes irritation to skin. Symptoms include redness, itching, and pain, pimples, boils, hives and blisters.

INHALATION: Causes irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

INGESTION: Ingestion may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

CHRONIC HEALTH EFFECTS: Prolonged exposure to lithium salts may cause kidney damage. Chronic ingestion of iodides may produce iodism. Symptoms include skin rash, running nose, headache and irritation of mucous membranes.

ACUTE HEALTH EFFECTS: Lithium salts are toxic to the central nervous system. Irritating to skin, eyes and respiratory tract.

SECTION 4 First Aid Measures

EYE EXPOSURE: Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

SKIN EXPOSURE: Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as

difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.
INGESTION: Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

SECTION 5 Firefighting Measures

FLASH POINT: not applicable
AUTO IGNITION TEMPERATURE: none
EXPLOSION LIMITS: none
EXTINGUISHING MEDIUM: None. Material is non flammable
SPECIAL FIREFIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: none
UNUSUAL FIRE OR EXPLOSION HAZARDS: No unusual fire or explosion hazards.

SECTION 6 Accidental Release Measures

SPILL AND LEAK PROCEDURES: To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite or other suitable inert material and swept up.

SECTION 7 Handling and Storage

HANDLING AND STORAGE: Store material in a tightly sealed container away from moisture. Handle under a dry atmosphere of air or nitrogen. Prolonged exposure to the atmosphere may degrade the product.

SECTION 8 Exposure Controls and Personal Protection

EYE PROTECTION: Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.
SKIN PROTECTION: Chemical-resistant.
VENTILATION: If possible, handle the material in an efficient fume hood.
RESPIRATOR: If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

SECTION 9 Physical and Chemical Properties

COLOR AND FORM: colorless to yellow xtl.
MOLECULAR WEIGHT: 133.84 (187.89)
MELTING POINT (DEG. C.): none
BOILING POINT: no data
VAPOR PRESSURE: not applicable
SPECIFIC GRAVITY: 3.43
SOLUBILITY IN WATER: 165g/100cc (20°C)

SECTION 10 Stability and Reactivity

STABILITY: hygroscopic

HAZARDOUS POLYMERIZATION: no hazardous polymerization

CONDITIONS TO AVOID: contact with moisture.

INCOMPATIBILITY: Oxidizing agents, halogens and active metals.

DECOMPOSITION PRODUCTS: Lithium iodide and water.

SECTION 11 Toxicological Information

RTECS DATA: No information in the RTECS files.

MUTAGENIC EFFECTS: no data

TETRAOGENIC EFFECTS: no data

CARCINOGENIC EFFECTS: no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 Ecological Information

ECOLOGICAL INFORMATION: No information available

SECTION 13 Disposal Considerations

DISPOSAL: Dispose of in according to local state and federal regulations.

SECTION 14 Transportation Information

Non-hazardous

Non-hazardous

SECTION 15 Regulatory Information

TSCA: Not listed in the TSCA inventory

SARA (TITLE 313): Title compound not listed

SECTION 16 Other Information

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

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