



SDS #: 452

Revision Date: March 21, 2014

Lithium Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Lithium

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-9932

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Substances and mixtures which, in contact with water, emit flammable gases (Category 1). In contact with water releases flammable gases which may ignite spontaneously (H260). Handle under inert gas. Protect from moisture (P231+P232). Keep away from any possible contact with water, because of violent reaction and possible flash fire (P223).

Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314). Do not breathe dust or fumes (P260).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Lithium	7439-93-2	Li	6.94	

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

If on skin or hair: Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Brush off loose particles from skin (P335). **If swallowed:** Rinse mouth. Do NOT induce vomiting (P301+P330+P331). Wash contaminated clothing before reuse (P363).

SECTION 5 — FIRE FIGHTING MEASURES

Flammable solid. Dangerous fire risk.

Reacts violently with water. When heated to decomposition, may emit toxic fumes.

In case of fire: Use a Class D, Met-L-X, or dry sand as a fire extinguisher. Avoid water contact, violent reaction with water.

NFPA Code

H-3

F-2

R-2

No water

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Cover metal with dry oil (dry kerosene, dry mineral oil, etc.). Return metal to a container and keep covered with dry oil.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

Always store under dry oil (kerosene or mineral oil). Store in a glass bottle inside a Flinn Saf-Stor™ can, in a cool, dry place.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Very soft, silvery metal. Odorless.

Boiling point: 714 °C

Soluble: Liquid ammonia. Water and acids, but releases hydrogen gas.

Melting point: 179 °C

Specific gravity: 0.534

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with iron, iron salts, phosphorus, sulfur, oxygen, nickel and its alloys, chlorinated solvents, halogens, and heavy metals. Reacts violently with water.

Shelf life: Indefinite, if stored safely. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #3 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Lithium; Hazard class: 4.3, Dangerous when wet; UN number: UN1415

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-102-5), RCRA code D001, D003.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

Revision Date: March 21, 2014
