

MSDS# 00857

Section 1 - Chemical Product and Company Identification

MSDS Name: Lithium bromide

Catalog Numbers: AC199870000, AC199871000, AC199875000, AC212530000, AC212530250, L117-500

Synonyms: Lithium monobromide.

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 7550-35-8
Chemical Name: Lithium bromide
%: 99
EINECS#: 231-439-8

Hazard Symbols: XN



Risk Phrases: 22

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Hygroscopic (absorbs moisture from the air). Harmful if swallowed. May cause kidney damage. May cause central nervous system effects. May cause cardiac disturbances. May cause eye, skin, and respiratory tract irritation. Target Organs: Blood, kidneys, central nervous system, cardiovascular system.

Potential Health Effects

Eye: May cause eye irritation.

Skin: Exposure to bromides may cause rashes, especially of the face (resembling acne) and boils. Anhydrous lithium bromide is extremely hygroscopic and contact with tissue can produce a dehydrating action resulting in localized burns.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause disturbed blood electrolyte balance. Large doses of lithium may cause dizziness, prostration, and kidney damage. Dehydration, weight loss, slurred speech, blurred vision, sensory loss, ataxia (failure of muscular coordination), tremors, and convulsions may occur.

Inhalation: May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

Chronic ingestion may cause dizziness, ringing in the ears, visual disturbances, tremors, and mental confusion.

Chronic: Prolonged absorption may affect electrolyte balance and impair kidney function. Dehydration, weight loss, skin effects, and thyroid disturbances have been reported. Chronic exposure may cause kidney damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 0; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid breathing dust.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Lithium bromide	none listed	none listed	none listed

OSHA Vacated PELs: Lithium bromide: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or

Respirators: European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder

Color: white

Odor: none reported

pH: Neutral/Alkaline

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not applicable.

Viscosity: Not applicable.

Boiling Point: 1265 deg C (2,309.00°F)

Freezing/Melting Point: 547 deg C (1,016.60°F)

Decomposition Temperature: Not available

Solubility in water: Soluble

Specific Gravity/Density: 3.46

Molecular Formula: LiBr

Molecular Weight: 86.85

Section 10 - Stability and Reactivity

Chemical Stability:	Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid:	Dust generation, moisture, excess heat.
Incompatibilities with Other Materials	Strong acids.
Hazardous Decomposition Products	Hydrogen bromide, oxides of lithium.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 7550-35-8: OJ5755000
	RTECS:
	CAS# 7550-35-8: Oral, mouse: LD50 = 1840 mg/kg;
LD50/LC50:	Oral, mouse: LD50 = 2353 mg/kg;
	Oral, rat: LD50 = 1800 mg/kg;
	.
	Other: Oral, rat: LD50 = 1800
Carcinogenicity:	Lithium bromide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	No information found.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not Regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7550-35-8: 1

Canada

CAS# 7550-35-8 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7550-35-8 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7550-35-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 6/29/1999

Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
