lithium bromide 7550-35-8 MSDS

Name:	Lithium Bromide Material Safety Data Sheet
Synonym:	Lithium Monobromide
CAS:	7550-35-8

Section 1 - Chemical Product

MSDS Name:Lithium Bromide Material Safety Data Sheet
Synonym:Lithium Monobromide

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
7550-35-8	Lithium bromide	ca.100	231-439-8

Hazard Symbols: XN
Risk Phrases: 22

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Harmful if swallowed.Hygroscopic (absorbs moisture from the air).
Potential Health Effects
Eye:
Causes eye irritation and possible burns.
Skin:
Chronic ingestion may cause dizziness, ringing in the ears, visual disturbances, tremors, and mental confusion. 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 central nervous system depression. May cause disturbed blood electrolyte balance. Causes gastrointestinal tract irritation.
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. May be harmful if swallowed. May produce depression, emaciation with severe cases resulting in pyschosis and mental deterioration.
Inhalation:
May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.
Chronic:
Chronic ingestion may cause dizziness, ringing in the ears, visual disturbances, tremors, and mental

confusion. 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. Wash clothing before reuse.
Ingestion:
Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. 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. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.
Extinguishing Media:
Use extinguishing media most appropriate for the surrounding fire.
Cool containers with flooding quantities of water until well after fire is out. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

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. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container

tightly closed. Do not ingest or inhale.
Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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 CAS# 7550-35-8: 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.
Respirators:
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or 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: 1.0 mm Hg @ 748 deg C
Viscosity: Not applicable.
Boiling Point: 1265 deg C
Freezing/Melting Point: 547 deg C
Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: Not available.
Solubility in water: Soluble.
Specific Gravity/Density: 3.464 @ 35¶C
Molecular Formula: LiBr
Molecular Weight: 86.845

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:

Incompatible materials, dust generation, moisture, excess heat, exposure to moist air or water.
Incompatibilities with Other Materials:
Moisture, strong oxidizing agents, strong acids.
Hazardous Decomposition Products:
Irritating and toxic fumes and gases, hydrogen bromide, oxides of lithium.
Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 7550-35-8: OJ5755000 LD50/LC50:
CAS# 7550-35-8: Oral, mouse: LD50 = 1840 mg/kg; Oral, mouse: LD50 = 2353 mg/kg; Oral, rat: LD50 = 1800 mg/kg.
Oral, rat: LD50 = 1800 Carcinogenicity:
Lithium bromide - Not listed by ACGIH, IARC, or NTP.
Other:
See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

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

Section 14 - TRANSPORT INFORMATION

IATA
Not regulated as a hazardous material.
IMO
Not regulated as a hazardous material.
RID/ADR
Not regulated as a hazardous material.

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.
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 - ADDITIONAL INFORMATION

N/A