



**LITHIUM BROMIDE**  
**CAS No 7550-35-8**

**MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifiers**

Product name : Lithium Bromide

CAS-No. : 7550-35-8

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040  
Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Acute toxicity, Oral (Category 4), H302  
Skin irritation (Category 2), H315  
Eye irritation (Category 2), H319  
Skin sensitisation (Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Warning

Hazard statement(s)

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

|                                |  |
|--------------------------------|--|
| Precautionary statement(s)     |  |
| P280                           | Wear protective gloves.  |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Supplemental Hazard Statements | none   |

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Lithium monobromide

Formula : BrLi  
Molecular weight : 86.85 g/mol  
CAS-No. : 7550-35-8  
EC-No. : 231-439-8

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component              |           | Classification                                 | Concentration |
|------------------------|-----------|--|---------------|
| <b>Lithium bromide</b> |           |  |               |
| CAS-No.                | 7550-35-8 | Acute Tox. 4; Skin Irrit. 2; Eye               | <= 100 %      |
| EC-No.                 | 231-439-8 | Irrit. 2; Skin Sens. 1; H302, H315, H319, H317 |               |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 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. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 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

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## **5.2 Special hazards arising from the substance or mixture**

Hydrogen bromide gas, Lithium oxides

## **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## **5.4 Further information**

No data available

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

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

Hygroscopic.

Storage class (TRGS 510): Non Combustible Solids

### **7.3 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**

### **8.1 Control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|   |                                    |
|---|------------------------------------|
| a) Appearance                                   | Form: powder<br>Colour: beige      |
| b) Odour  | odourless                          |
| c) Odour Threshold                              | No data available                  |
| d) pH   | 7.0 at 10 g/l at 20 °C             |
| e) Melting point/freezing point                 | Melting point/range: 550 °C - lit. |
| f) Initial boiling point and boiling range      | 1,265 °C                           |
| g) Flash point                                  | No data available                  |
| h) Evaporation rate                             | No data available                  |
| i) Flammability (solid, gas)                    | No data available                  |
| j) Upper/lower flammability or explosive limits | No data available                  |
| k) Vapour pressure                              | 1.0 hPa at 748 °C                  |
| l) Vapour density                               | No data available                  |
| m) Relative density                             | 3.460 g/cm <sup>3</sup> at 20 °C   |
| n) Water solubility                             | 1,490 g/l at 20 °C                 |
| o) Partition coefficient: n-octanol/water       | No data available                  |
| p) Auto-ignition temperature                    | No data available                  |
| q) Decomposition temperature                    | No data available                  |
| r) Viscosity                                    | No data available                  |
| s) Explosive properties                         | Not explosive                      |
| t) Oxidizing properties                         | No data available                  |

### 9.2 Other safety information

|              |                       |
|--------------|-----------------------|
| Bulk density | 1.8 kg/m <sup>3</sup> |
|--------------|-----------------------|

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Avoid moisture.

### 10.5 Incompatible materials

Strong acids, Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen bromide gas, Lithium oxides

Other decomposition products - No data available

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 1,800 mg/kg(Lithium bromide)

LD50 Intraperitoneal - Guinea pig - 580 mg/kg(Lithium bromide)

LD50 Intraperitoneal - Mouse - 1,160 mg/kg(Lithium bromide)

LD50 Subcutaneous - Mouse - 1,680 mg/kg(Lithium bromide)

#### Skin corrosion/irritation

Skin - Rabbit(Lithium bromide)

Result: Irritating to skin.

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eye irritation(Lithium bromide)

#### Respiratory or skin sensitisation

Buehler Test - Guinea pig(Lithium bromide)

Result: May cause sensitisation by skin contact.

(OECD Test Guideline 406)

#### Germ cell mutagenicity

No data available(Lithium bromide)

#### 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.

#### Reproductive toxicity

No data available(Lithium bromide)

#### Specific target organ toxicity - single exposure

No data available(Lithium bromide)

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available(Lithium bromide)

## Additional Information

RTECS: OJ5755000

Large doses of lithium ion have caused dizziness and prostration, and can Dehydration, weight loss, dermatological effects, and thyroid disturbance include slurred speech, blurred vision, sensory loss, ataxia, and convuls effects such as tremor, clonus, and hyperactive reflexes may occur as a r, Bromide rashes, especially of the face, and resembling acne and furunculosis, often occur when bromide inhalation or administration is prolonged., Acute symptoms of overexposure include:, depression, psychosis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Lithium bromide)

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish                      LC50 - Oncorhynchus mykiss (rainbow trout) - 438 mg/l - 96 h(Lithium bromide)  
NOEC - Oncorhynchus mykiss (rainbow trout) - 128 mg/l - 96 h(Lithium bromide)

### 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available(Lithium bromide)

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: -                                      IMDG: -                                      IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: -                                      IMDG: -                                      IATA: -

### 14.4 Packaging group

ADR/RID: -                                      IMDG: -                                      IATA: -

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user**

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

|      |                                      |
|------|--------------------------------------|
| H302 | Harmful if swallowed.                |
| H315 | Causes skin irritation.              |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation.       |

**Further information**

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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.