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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Lithium bromide, 99.995%+ Product Code: L 2941 CAS NO: 7550-35-8

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

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 Eve irritation (Category 2), H319 Skin sensitization (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 H315 H317 H319 Precautionary statement(s) P261 P264 P280 P301 + P312 unwell P302 + P352 P305 + P351 + P338

Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard statement(s) H317 Precautionary statement(s) P261 P302 + P352 Supplemental Hazard Statements 2.3 Other hazards Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Avoid breathing dust. Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. none

Warning

May cause an allergic skin reaction.

Avoid breathing dust. IF ON SKIN: Wash with plenty of water.

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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

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

h

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

SECTION 4: First aid measures

SECTION 4.1 Installa measures
4.1 Description of first-aid measures
General advice
Show this material safety data sheet to the doctor in attendance.
If inhaled
After inhalation: fresh air.
In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with
water/ shower. Consult a physician.
In case of eye contact
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact
lenses.
If swallowed
After swallowing: immediately make victim drink water (two glasses at most). 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 measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Hydrogen bromide gas Lithium oxides Not combustible. Ambient fire may liberate hazardous vapours. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. 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 Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections For disposal see section 13. **SECTION 7: Handling and storage** 7.1 Precautions for safe handling For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed. Dry. Hygroscopic. Storage class Storage class (TRGS 510): 13: 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 Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eve/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L **Body Protection** protective clothing Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

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These measures have to be properly documented. 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) Physical state b) Color c) Odor d) Meltina point/freezing point e) Initial boiling point and boiling range f) Flammability (solid, gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH I) Viscosity m) Water solubility n) Partition coefficient: n-octanol/water

o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Avoid moisture.
no information available
10.5 Incompatible materials
Strong acids
10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L.

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powder beige odorless Melting point/range: 550 °C - lit.

1.265 °C

The product is not flammable. - Test N.1: Test method for readily combustible solids No data available

No data available No data available

No data available

7,0 at 10 g/l at 20 °C Viscosity, kinematic: No data available Viscosity, dynamic: No data available 1.600 g/l at 20 °C - soluble No data available

1,0 hPa at 748 °C 3,460 g/cm3 at 20 °C No data available No data available

No data available

No data available none

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Chronic Effects on Humans: CARCINOGENIC EFFECTS: C Other Toxic Effects on Humans: Hazardous in case of skin Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not availa Special Remarks on other Toxic Effects on Humans: Not availa	contact (irritant), of inhalation (lung irritant).	Y NIOSH.
SECTION 12: Ecological information 12.1 Toxicity Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) NOEC - Oncorhynchus mykiss (rainbow trout) - 128 mg/l - 9 Toxicity to fish(Chronic toxicity) NOEC - Danio rerio (zebra fish) - 17,34 mg/l - 34 d 12.2 Persistence and degradability The methods for determining biodegradability are not applic 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered bioaccumulative and toxic (PBT), or very persistent and very levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment : The substance/mixture does not contain	bé h cable to inorganic substances. d to be either persistent, y bioaccumulative (vPvB) at	
considered to have endocrine disruptin according to REACH Article 57(f) or Co Delegated regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0 12.7 Other adverse effects No data available	g properties ommission or Commission	
SECTION 13: Disposal considerations 13.1 Waste treatment methods Product See www.retrologistik.com for processes regarding the retu containers, or contact us there if you have further questions		
SECTION 14: Transport information		
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	INDO.	
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		
Further information		
Not classified as dangerous in the meaning of transport reg	ulations.	

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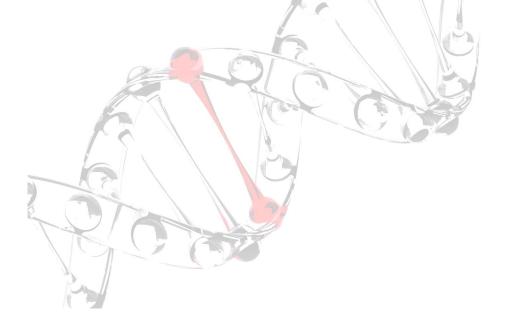
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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Other regulations Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work. 15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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