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Tel: +91 98200 41841 Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name: Lithium pieces, ≤10 mm, 99.9%

Product Code : L 0151 CAS No: 7439-93-2

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

No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no.: + 91 98200 41841 (10:00 am - 06:00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Substances and mixtures which

in contact with water emit flammable gases, (Category 1). Skin corrosion, (Sub-category

1B)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word Hazard Statements H260

H314

Precautionary Statements

P223

P231 + P232

P260 P280

P303 + P361 + P353

P305 + P351 + P338

Supplemental Hazard information (EU)

EUH014

Reduced Labeling (<= 125 ml)

Pictogram Signal Word

Hazard Statements

H314

Precautionary Statements

P260 P280 H260: In contact with water releases flammable gases which may ignite spontaneously

H314: Causes severe skin burns and eye damage.

Danger

In contact with water releases flammable gases which may ignite spontaneously.

Causes severe skin burns and eye damage.

Do not allow contact with water.

Handle and store contents under inert gas. Protect from moisture

Do not breathe dust.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

Reacts violently with water.

Danger

Causes severe skin burns and eye damage.

Do not breathe dust.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

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P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

insina

Supplemental Hazard information (EU)

EUH014

Reacts violently with water.

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.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : L

 Molecular weight
 : 6,94 g/mol

 CAS-No.
 : 7439-93-2

 EC-No.
 : 231-102-5

Component		Classification	Concentration
lithium			
CAS-No. EC-No.	7439-93-2 231-102-5	Water-react 1; Skin Corr. 1B; H260, H314	<= 100 %

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

First aiders need to protect themselves. Show this material safety data sheet to the doctor

in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Extinguishing media: sodium chloride/hydrogen carbonate or lime stone. Special powder against metal fire

Unsuitable extinguishing media

Foam Water

5.2 Special hazards arising from the substance or mixture

Lithium oxides

Not combustible.

May not get in touch with: Water

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

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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. Risk of explosion.

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

Advice on safe handling

Keep workplace dry. Do not allow product to come into contact with water.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store under argon. Handle under argon.

Tightly closed. Keep away from heat and sources of ignition.

Never allow product to get in contact with water during storage.

Storage class

Storage class (TRGS 510): 4.3: Hazardous materials, which set free flammable gases upon contact with water

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

Eye/face protection

Use equipment for eye protection tested and approved under appropriate

government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety

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goggles

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 EN 16523-1 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 laver thickness: 0.11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de). 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.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color c) Odor

d) Melting 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: granular No data available

No data available

Melting point/range: 180 °C - lit.

1.342 °C - lit.

The product is not flammable.

No data available

Not applicable No data available

No data available

No data available

Viscosity, kinematic: No data available Viscosity, dynamic: 0,57 mPa.s at 200 °C

Risk of violent reaction. No data available

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n-octanol/water

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o) Vapor pressure p) Density Relative density

q) Relative vapor density

r) Particle characteristics

s) Explosive properties

t) Oxidizing properties9.2 Other safety information

No data available

1 hPa at 723 °C 0,534 g/mL at 25 °C - lit. No data available No data available

No data available

No data available

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts violently with water. 10.2 Chemical stability sensitive to moisture

10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:

Water Acids

Halogenated hydrocarbon Carbon dioxide (CO2)

boron trifluoride

halogen-halogen compounds

chromyl chloride chromium(VI) oxide

Boranes

Fluorine

halogen compounds

carbon dioxide

phosphorus platinum

Mercury

Rust

Nitric acid

nitrogen

Sulfides

metallic oxides

sodium carbonate

Hydrogen

Risk of explosion with:

nitrogen halogens

sulfur

Bromine

Bromoform

Chlorine

Chloroform

Diazonium compounds

dichloromethane

Halogenated hydrocarbon

iodine

methyl iodine

Peroxides

mineral acids

Oxygen

tetrachloromethane

thionyl chloride

trichloroethene

sulphur dioxide



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Sulphuric acid silver salt Carbon monoxide with

Water

Water

with

Powdered metals

10.4 Conditions to avoid

Reacts with water to generate Hydrogen gas.

Moisture.

10.5 Incompatible materials

No data available

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.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None, by NTP, None, by OSHA, None, by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

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 to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods No data available

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SECTION 14: Transport information

14.1 UN number

ADR/RID: 1415 IMDG: 1415 IATA: 1415

14.2 UN proper shipping name

ADR/RID: LITHIUM
IMDG: LITHIUM
IATA: Lithium
Passenger Aircraft: Not permitted for transport

14.3 Transport hazard class(es)

ADR/RID: 4.3 IMDG: 4.3 IATA: 4.3 14.4 Packaging group
ADR/RID: I IMDG: I IATA: I
14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user Tunnel restriction code : (B/E) Further information : No data available

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.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

O1 OTHER HAZARDS O2 OTHER HAZARDS Other regulations

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.