An ISO 9001: 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel: + 91 98200 41841

Email: info@ottokemi.com Web: www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Lithium (Li) ICP Standard Solution 1 gm/L In Dilute HNO3

Product Code: L 6579

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 [CLP]Mixture/Substance: SDS EU 2015: According to Annex II

of Regulation (EC) No. 453/2010 (REACH Annex II)

Carcinogenicity, Category 1B

Serious eye damage/eye

irritation. Category 2

Skin corrosion/irritation,

H350

H319 H315

Category 2

Full text of classification categories and H statements; see section 16 Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Hazard pictograms (CLP):

GHS08 GHS07

Signal word (CLP):

Hazard statements (CLP):

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H350 - May cause cancer

P201 - Obtain special instructions before use

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

IF exposed or concerned: Get medical advice/attention

Precautionary statements (CLP): P305+P351+P338 -

P308+P313 -

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance Not applicable 3.2. Mixture

O'ET HIDREN O			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	Product identifier	75 - 99	Not classified
LITHIUM NITRATE AR	CAS No) 7732-18-5 (EC no) 231-791-2	1 - 5	Not classified
Nitric acid	(EC no) 231-714-2	1 - 5	Ox. Liq. 1, H271 Skin Corr.

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1A, H314

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact

: Wash with plenty of soap and water. Wash contaminated clothing before reuse. Get medical advice/attention.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion

: Rinse mouth. Do not induce vomiting. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: May cause cancer.

Symptoms/injuries after skin contact

: Causes skin irritation.

Symptoms/injuries after eye contact

: Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Dry powder. Carbon dioxide. Foam. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Collect spillage. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Obtain special instructions before use. Avoid contact with skin and eyes. Do not breathe vapours.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep container tightly closed. Store in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection : protective gloves

Eye protection: Chemical goggles or safety glasses

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Skin and body protection : Wear suitable protective clothing Respiratory protection : Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Clear Colorless.
Odour : No data available
Odour threshold : No data available
PH: No data available
No data available

Relative evaporation rate (butylacetate=1): No data available

Melting point No data available Freezing point No data available Boiling point No data available Flash point : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available
Solubility : No data available
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Air contact.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

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 additional information available

12.2. Persistence and degradability

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No additional information available 12.3. Bioaccumulative potential No additional information available 12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment No additional information available 12.6. Other adverse effects No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods Product/Packaging disposal recommendations : Dispose of contents/container to ...

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 3264

UN-No. (IMDG) : 3264

UN-No. (IATA) : 3264

UN-No. (ADN) : 3264

UN-No. (RID) : 3264

14.2. UN proper shipping name
Proper Shipping Name (ADR)
Proper Shipping Name (IMDG)
Proper Shipping Name (IMDG)
Proper Shipping Name (IATA)
Proper Shipping Name (ADN)
Proper Shipping Name (ADN)
Proper Shipping Name (RID)
Proper Shipping Name (RID)

1 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Transport document description (ADR)

1. UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III, (E)

1. UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III, MARINE

POLLUTANT

Transport document description (IATA)

Transport document description (ADN)

Transport document description (RID)

: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

: UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8

. IMD

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

: IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8

: ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8

RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8

14.4. Packing group

Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III

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Packing group (ADN) : 111 : III Packing group (RID) 14.5. Environmental hazards

Dangerous for the environment

Marine pollutant : Yes (IMDG only)

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport Classification code (ADR)

: C1 Special provision (ADR) : 274 Limited quantities (ADR) : 5L Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19 Portable tank and bulk container · T7

instructions (ADR)

Portable tank and bulk container special : TP1, TP28

provisions (ADR)

Tank code (ADR) : L4BN Vehicle for tank carriage : AT Transport category (ADR) . 3 Special provisions for carriage - Packages : V12

(ADR) Hazard identification number (Kemler No.) : 80

Orange plates:

Tunnel restriction code (ADR) : E EAC code 2X APP code В

- Transport by sea Special provision (IMDG) 223, 274 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01 IBC packing instructions (IMDG) : IBC03 Tank instructions (IMDG) : T7 Tank special provisions (IMDG) : TP1, TP28

EmS-No. (Fire) F-A EmS-No. (Spillage) S-B Stowage category (IMDG) A Stowage and handling (IMDG) SW₂ MFAG-No : 154

- Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) : Y841

PCA limited quantity max net quantity

: 852 PCA packing instructions (IATA) PCA max net quantity (IATA) : 5L CAO packing instructions (IATA) 856 CAO max net quantity (IATA) : 60L Special provision (IATA) : A3 ERG code (IATA) : 8L

- Inland waterway transport Classification code (ADN) · C1 Special provisions (ADN) : 274 Limited quantities (ADN) : 5 L Excepted quantities (ADN) : E1 Carriage permitted (ADN) · T Equipment required (ADN) : PP. EP Number of blue cones/lights (ADN) : 0

- Rail transport

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Classification code (RID) : C1
Special provision (RID) : 274
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container : T7

instructions (RID)

Portable tank and bulk container special : TP1, TP28

provisions (RID)

Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 3
Special provisions for carriage – Packages : W12
(RID)
Colis express (express parcels) (RID) : CE8

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance Contains no REACH Annex XIV substances.

15.1.2. National regulations

Germany

AwSV/vwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work

with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No additional information available

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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