TRADEASIA INTERNATIONAL PTE LTD
133 Cecil Street # 12-03 Keck Seng Tower, Singapore 069535,
Republic Of Singapore
Telp. +65 6227 6365 - **Fax**. +65 6225 6286
www.chemtradeasia.com

Material Safety Data Sheet
LITHIUM HYDROXIDE

Section 1 - Product Identification

Synonyms : Lithium hydroxide, anhydrous
CAS No. : 1310-66-3
Molecular Weight : 23.95 g/mol
Chemical Formula : LiOH
Company Identification : Tradeasia International Pte. Limited
Address : 133 Cecil Street # 12-03 Keck Seng Tower, Singapore
Tel: +65-6227 6365
Fax: +65-6225 6286
Email: contact@chemtradeasia.com

Section 2 – Hazards Identification

Emergency Overview

Appearance	Crystalline powder
Color	White
Odor	Odorless

GHS Classification

Chemical considered hazardous by 2012 OSHA Hazard Communication Standard
Skin and eye irritation, Category 1B
Acute oral toxicity, Category 4
Serious eye damage, Category 1
Specific target organ (kidney) toxicity, Category 1

Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements

H302 Harmful if swallowed
H313+H333 May be harmful in contact with skin or if inhaled

Precautionary Statements

Prevention

P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product

Response

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.

Storage

P403 + P233 Store in a well-ventilated place. Keep the container tightly closed.
P235 Keep cool.
P405 Store locked up.

Disposal

P501 Dispose of contents/container to an approved waste disposal plant

Section 3 – Composition/Information on Ingredients

Ingredients

Component	CAS-No.	EINECS/ELINCS	Concentration (%)
Lithium hydroxide	1310-66-3	Unlisted	98

Section 4 – First-Aid Measures

General advice : Take off contaminated clothing.
Inhalation : If inhaled, remove from exposure and move to fresh air. Transport to the nearest medical facility.
Skin contact : Remove contaminated clothing. IMMEDIATE medical treatment. Corrosive injuries that are not treated are hard to cure.
Eye contact : IMMEDIATELY flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately if symptoms persist.
Ingestion : If swallowed, rinse mouth. Call the doctor if you feel unwell.

Notes to physician

Risks : Not available
Treatment : Not available

Section 5 – Fire Fighting Measures

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	:	Water jet
Specific hazards during fire fighting / Specific hazards arising from the chemical	:	Non-combustible.
Combustion products	:	Not applicable.
Special protective equipment for fire-fighters	:	No information available.
Further information	:	No information available.

See also Section 9. Physical and chemical properties: Safety data

Section 6 – Accidental Release Measures

Personal Precautions	:	Do not breathe dust. Avoid contact with skin and eyes. Provide adequate ventilation.

Environmental Precautions	:	Do not flush into surface water or sanitary sewer systems. Keep away from drains, surface and groundwater.
Methods for cleaning up/methods for containment	:	Take up mechanically for example using a shovel. Ensure dust is controlled.
Additional Advice	:	For personal protection see section 8.

Section 7 – Handling and Storage

HANDLING

Advice on safe handling

Provide adequate ventilation. Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

STORAGE

Requirements for storage areas and containers

Corrosive area. Store in a cool, well-ventilated and dry place. Store in a tightly closed container. Maximum storage temperature is 25°C. Store protected from moisture and under inert atmosphere.

Section 8 – Exposure Controls/Personal Protection (later)

Exposure Guidelines

None under normal usage conditions.

Personal protective equipment

Eye/face protection	:	Wear tight sealing eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Use face protection shield.
Hand protection	:	Wear appropriate protective gloves
Skin and body protection	:	Protective suit to prevent skin exposure
Respiratory protection	:	No equipment needed when used under normal conditions
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using, do not smoke.

Section 9 – Physical and Chemical Properties

Appearance

Form	: Solid
Color	: White
Odor	: Odorless
Odor Threshold	: No data available

Safety Data

pH	: 14
Melting point	: 450 °C
Boiling point	: 923.9 °C

Flash point	: No data available
Evaporation rate	: Not applicable
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapor pressure	: Negligible
Vapor density	: Not applicable
Specific gravity	: 2.5
Water solubility	: Soluble in water
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available

Section 10 – Stability and Reactivity

Conditions to avoid	: Dust formation. Avoid excess heat, exposure to moisture of water.
Materials to avoid	: Corrosive to copper and copper bearing alloys. Oxidizing solid/liquids.
Conditions to avoid	: Strong oxidizing agents, strong acids, lead, metals, carbon dioxide (CO_2).
Hazardous decomposition products	: Thermal decomposition leads to release of irritating vapors and gases.
Reactivity	: None known.
Chemical stability	: Hygroscopic. Air sensitive.
Hazardous reactions	: None under normal processing
Other Data	: This material is considered stable under normal ambient anticipated storage and handling conditions of temperature and pressure. No decomposition if applied and stored as directed.

Section 11 – Toxicological Information

Toxicology Assessment
Product Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lithium hydroxide	330 mg/kg (rat)	Not listed	LC50 = 960 mg/m^3 (rat) 4h

Irritation	: Causes burns by all exposure routes.
Sensitization	: No information available.

Carcinogenicity:

IARC	: Not listed
OSHA	: Not listed
NTP	: Not listed
ACGIH	: Not listed
Mexico	: Not listed

Other adverse effects
The toxicological properties have not been fully investigated

Section 12 – Ecological Information

Ecotoxicology Assessment
Do not empty into drains

Elimination information (persistence and degradability)

Bioaccumulation	: No information available.
Biodegradability	: No information available.
Result of PBT assessment	: No information available.

Section 13 – Disposal Considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. They must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14 – Transport Information

DOT

UN-No	UN2680
Proper Shipping Name	LITHIUM HYDROXIDE
Hazard Class	8
Packing Group	II

IATA

UN-No	UN2680
Proper Shipping Name	LITHIUM HYDROXIDE
Hazard Class	8
Packing Group	II

IMDG/IMO

UN-No	UN2680
Proper Shipping Name	LITHIUM HYDROXIDE
Hazard Class	8
Packing Group	II

TDG

UN-No	UN2680
Proper Shipping Name	LITHIUM HYDROXIDE
Hazard Class	8
Packing Group	II

Section 15 – Regulatory Information

US Inventories

Component	CAS-No	TSCA	TSCA Inventory notification	TSCA-EPA Regulatory Flags
Lithium hydroxide	1310-65-2	X	X	X

International Inventories

Component	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Lithium hydroxide	X	-	215-183-4	-	-	X	X	X	X	KE-22570

Legends
X - Listed
'-' - Not listed
TSCA - Toxic Substance Control Act, (40 CFR Part 710)
AICS - Australia, Inventory of Chemical Substance
EINECS - European Inventory of Existing Chemical Substances
DSL - Domestic Substances List
NDSL - Canada, Domestic Substances List
ELINCS - European List of Notified Chemical Substances
NLP - No-longer Polymers List
PICCS - Philippine Inventory of Chemicals and Chemical Substances
ENCS - Japanese Existing and New Chemical Substances Inventory
IECSC - Inventory of Existing Chemical Substances in China
KECL - Korea Existing Chemicals List
TWA - Time weighted average

Section 16 : Additional Information

Revision Date : 21-December-2020

Print Date : 21-December-2020

NFPA Hazard Ratings
Health : 3
Flammability : 0
Instability : 0
Physical hazards : N/A

Disclaimer:
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.