# LITHIUM HYDROXIDE (MONOHYDRATE) **EXTRA PURE MSDS**

CAS No: 1310-66-3 MSDS



# MATERIAL SAFETY DATA SHEET (MSDS)

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

#### **Product identifier**

Product form : Substance

CAS No : 1310-66-3 Product code : 04442

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

#### Relevant identified uses 1.2.1.

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### 1.2.2. **Uses advised against**

No additional information available

### Details of the supplier of the safety data sheet

Labogens Fine Chem Industries 1st Floor, Above Bank of India, Guru Vihar, Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com

#### **Emergency telephone number**

**Emergency number** : +91 7707855700 (9:00am - 6:00 pm)

#### SECTION 2: Hazards identification

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H314 Category 1A H302 Acute toxicity (oral),

Category 4

Full text of classification categories and H statements : see section 16

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Xn: R22 C: R35

Full text of R-phrases: see section 16

09/04/2015 1/10 www.Labogens.com

Safety Data Sheet

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :





GHS07

GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician

#### 2.3. Other hazards

No additional information available

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Name : LITHIUM HYDROXIDE (MONOHYDRATE) Extra Pure

CAS No : 1310-66-3

Full text of R- and H-phrases: see section 16

### 3.2. Mixture

Not applicable

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with

water/shower. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER or

doctor/physician.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

www.Labogens.com 09/04/2015 2/10

# Safety Data Sheet

#### 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 : 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

No additional information available

## **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 : Clear up rapidly by scoop or vacuum.

#### 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 : Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during

pregnancy/while nursing.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling.

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

Technical measures : Comply with applicable regulations.

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

## 7.3. Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available

www.Labogens.com 09/04/2015 3/10

# Safety Data Sheet

#### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or face shield
Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear appropriate mask

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 41.95 g/mol Colour : White crystalline.

Odour : odourless.

Odour threshold : No data available

pH : 14

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

Melting point : No data available

Freezing point : No data available

Boiling point : 100 °C

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

Density : 1.51 g/cm³

Solubility : Water: 42 g/l at 20 °C

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

www.Labogens.com 09/04/2015 4/10

# Safety Data Sheet

# **SECTION 10: Stability and reactivity**

#### Reactivity 10.1.

Thermal decomposition generates: Corrosive vapours.

#### 10.2. **Chemical stability**

Stable under normal conditions of use.

#### Possibility of hazardous reactions

No additional information available

#### **Conditions to avoid**

Direct sunlight. Moisture. Air contact.

#### Incompatible materials

No additional information available

#### Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours.

## **SECTION 11: Toxicological information**

#### Information on toxicological effects

: Oral: Harmful if swallowed. Acute toxicity

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

pH: 14

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified Specific target organ toxicity (single

exposure)

: Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

: Not classified Aspiration hazard

Potential adverse human health effects

and symptoms

: Harmful if swallowed.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

09/04/2015 5/10 www.Labogens.com

# Safety Data Sheet

#### 12.2. Persistence and degradability

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) : 2680 UN-No. (IMDG) : 2680 UN-No.(IATA) : 2680 UN-No.(ADN) : 2680 UN-No. (RID) : 2680

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : LITHIUM HYDROXIDE
Proper Shipping Name (IMDG) : LITHIUM HYDROXIDE
Proper Shipping Name (IATA) : LITHIUM HYDROXIDE
Proper Shipping Name (ADN) : LITHIUM HYDROXIDE
Proper Shipping Name (RID) : LITHIUM HYDROXIDE

Transport document description (ADR)

Transport document description (IMDG)

Transport document description (IATA)

Transport document description (ADN)

Transport document description (ADN)

Transport document description (RID)

Transport document description (RID)

UN 2680 LITHIUM HYDROXIDE, 8, II

UN 2680 LITHIUM HYDROXIDE, 8, II

Transport document description (RID)

# 14.3. Transport hazard class(es)

### ADR

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

www.Labogens.com 09/04/2015 6/10

# Safety Data Sheet



#### **IMDG**

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) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

# 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

www.Labogens.com 09/04/2015 7/10

# Safety Data Sheet

#### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C6
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container : T3

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

: TP33

Tank code (ADR) : SGAN

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages : V11

(ADR)

Hazard identification number (Kemler No.) : 80

Orange plates

80 2680

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

### - Transport by sea

Limited quantities (IMDG) : 1 kg : E2 Excepted quantities (IMDG) Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) : B2, B4 Tank instructions (IMDG) : T3 Tank special provisions (IMDG) : TP33 : F-A EmS-No. (Fire) : S-B EmS-No. (Spillage) Stowage category (IMDG) : A Segregation (IMDG) : SG35 MFAG-No : 154

#### - Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y844
PCA limited quantity max net quantity : 5kg (IATA)

PCA packing instructions (IATA) : 859
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 863
CAO max net quantity (IATA) : 50kg
ERG code (IATA) : 8L

# - Inland waterway transport

Classification code (ADN) : C6
Limited quantities (ADN) : 1 kg
Excepted quantities (ADN) : E2

www.Labogens.com 09/04/2015 8/10

# Safety Data Sheet

Equipment required (ADN) : PP, EP

Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : C6
Limited quantities (RID) : 1kg
Excepted quantities (RID) : E2

Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4

Mixed packing provisions (RID) : MP10

Portable tank and bulk container : T3

instructions (RID)

Portable tank and bulk container special

provisions (RID)

: TP33

Tank codes for RID tanks (RID) : SGAN
Transport category (RID) : 2
Special provisions for carriage – Packages : W11

(RID)

Colis express (express parcels) (RID) : CE10 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

No REACH Annex XVII restrictions

LITHIUM HYDROXIDE (MONOHYDRATE) Extra Pure is not on the REACH Candidate List LITHIUM HYDROXIDE (MONOHYDRATE) Extra Pure is not on the REACH Annex XIV List

#### 15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to

VwVwS, Annex 3; WGK No 7131)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: 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

#### 15.2. Chemical safety assessment

No additional information available

www.Labogens.com 09/04/2015 9/10

Safety Data Sheet

## **SECTION 16: Other information**

### Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
R22	Harmful if swallowed
R35	Causes severe burns
С	Corrosive
Xn	Harmful

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

www.Labogens.com 09/04/2015 10/10