

# MATERIAL SAFETY DATA SHEET (MSDS)

## **BARIUM HYDROXIDE LR**

## 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : BARIUM HYDROXIDE LR

**Product code** : B0036300500

: BARIUM HYDROXIDE EXTRA PURE (OCTAHYDRATE) 97% Identification of the product

CAS No: 12230-71-6

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** Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

**SUVCHEM** 

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

## 2. Hazards identification -DSD

## 2.1. Classification of the substance or mixture

## Classification EC 67/548 or EC 1999/45

Classification : Xn; R20

C: R34

#### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

: Acute toxicity, Inhalation - Category 4 - Warning (CLP : Acute Tox. 4) H332 **Health hazards** 

Acute toxicity, Oral - Category 4 - Warning (CLP: Acute Tox. 4) H302 Skin corrosion - Category 1B - Danger (CLP: Skin Corr. 1B) H314

2.2. Label elements

## Labelling EC 67/548 or EC 1999/45

Symbol(s)







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# 2. Hazards identification -DSD (continued)

Symbol(s) : C : Corrosive T : Toxic

R Phrase(s) : R20 : Harmful by inhalation.

R22 : Harmful if swallowed. R34 : Causes burns.

S Phrase(s) : S26 : In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S36: Wear suitable protective clothing.

S37: Wear suitable gloves. S39: Wear eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (

show the label when possible).

#### Labelling Regulation EC 1272/2008 (CLP)

**Hazard pictograms** 





Signal words : Danger

**Hazard statements** : H314 : Causes severe skin burns and eye damage.

H302 : Harmful if swallowed. H332 : Harmful if inhaled.

**Precautionary statements** 

• **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• Response : P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.

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

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

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position

comfortable for breathing.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated

clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

• Storage : P405: Store locked up.

• Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.



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## 3. Composition/information on ingredients

Substance / Preparation : BARIUM HYDROXIDE EXTRA PURE (OCTAHYDRATE) 97%

Substance

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

#### 4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor. Call a POISON CENTER or doctor

if you feel unwell.

Skin contact : Immediately call a POISON CENTER or doctor. Wash with plenty of soap and

water. Remove/Take off immediately all contaminated clothing.

**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.

**Ingestion** : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or

doctor. Call a POISON CENTER or doctor if you feel unwell.

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

**Symptoms relating to use** : Danger of serious damage to health by prolonged exposure through inhalation.

Swallowing a small quantity of this material will result in serious health hazard.

Causes severe skin burns and eye damage.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

## 5. Fire-fighting measures

## 5.1. Extinguishing media

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

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

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

#### 5.2. Special hazards arising from the substance or mixture

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

Thermal decomposition generates : Corrosive vapours.

#### 5.3. Advice for fire-fighters



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## 5. Fire-fighting measures (continued)

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

#### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust.

Store away from other materials.

#### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

## 7. Handling and storage

#### 7.1. Precautions for safe handling

Handling : Use only outdoors or in a well-ventilated area. Wash contaminated clothing before

reuse. Wash thoroughly after handling. Do not eat, drink or smoke when using this

product. Do not breathe dust, fume, gas, mist, vapours, spray.

**Technical protective measures**: Provide good ventilation in process area to prevent formation of vapour.

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

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

closed when not in use.

**Storage regulation** : Comply with applicable regulations.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)



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## 7. Handling and storage (continued)

Specific end use(s) : None.

#### 8. Exposure controls/personal protection

#### 8.1. Exposure controls

**Personal protection** : Avoid all unnecessary exposure.

• Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

• Hand protection : Wear protective gloves.

Skin protection
 Eye protection
 Wear suitable protective clothing.
 Chemical goggles or face shield.

• Others : When using, do not eat, drink or smoke.

: 2,18

8.2. Control parameters

Density [g/cm3]

Occupational Exposure Limits : No data available.

#### 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Solid.

**Colour** : White crystalline

Odour : Odorless

Odour threshold : No data available. pH value : Not applicable.

: 78 °C Melting point [°C] Decomposition point [°C] : N/A Critical temperature [°C] : N/A Auto-ignition temperature [°C] : N/A Flammability (solid, gas) : N/A Flash point [°C] : N/A : 7800C **Boiling point [°C]** : N/A Initial boiling point [°C] Final boiling point [°C] : N/A : N/A **Evaporation rate** Vapour pressure [20°C] : N/A Vapour pressure mm/Hg : N/A Vapour density : N/A



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#### 9. Physical and chemical properties (continued)

Relative density, gas (air=1) : N/A Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : 5.6g/100g water @ 15

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : 12.5 at 50 g/l at 20

Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

## 10. Stability and reactivity

10.1. Reactivity

**Reactivity** : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

**Hazardous decomposition products**: Fumes. Carbon monoxide. Carbon dioxide.

Thermal decomposition generates: Corrosive vapours.



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## 11. Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity** 

• Inhalation : Harmful if inhaled.

• **Dermal** : Based on available data, the classification criteria are not met.

• Ingestion : Harmful if swallowed.

**Corrosion** : Causes severe skin burns and eye damage.

Irritation : Based on available data, the classification criteria are not met. : Based on available data, the classification criteria are not met. Sensitization Mutagenicity : Based on available data, the classification criteria are not met. Carcinogenicity : Based on available data, the classification criteria are not met. Toxic for reproduction : Based on available data, the classification criteria are not met. : Based on available data, the classification criteria are not met. STOT-single exposure STOT-repeated exposure : Based on available data, the classification criteria are not met. **Aspiration hazard** : Based on available data, the classification criteria are not met.

## 12. Ecological information

12.1. Toxicity

**Toxicity information** : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential** : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.



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#### 13. Disposal considerations

## 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 14. Transport information

#### 14.1. Land transport (ADR-RID)

Proper shipping name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.

UN N° : 3262 H.I. nr : 80 ADR - Class : 8

**Labelling - Transport** : 8 : Corrosive substance.



ADR - Classification code : C6

C6 C6

. 11

ADR - Group : II
ADR - Packing instructions : P002

ADR - Limited Quantity : 1 KG

**ADR - Tunnel code** 



: E : Passage forbidden through tunnels of category E.

#### 14.2. Sea transport (IMDG) [English only]

Proper shipping name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.

UN N° : 3262

**IMO-IMDG - Class or division** : 8 : Corrosive substance.

IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P002
IMO-IMDG - Limited quantities : 1 kg
IMO-IMDG - Marine pollution : No



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#### 14. Transport information (continued)

**EMS-Nr** : F-A S-B

#### 14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.

UN N° : 3262

IATA - Class or division : 8 : Corrosive substance.

IATA - Packing group : 11

IATA - Passenger and Cargo Aircraft : ALLOWED : 859

- Passenger and Cargo - Packing

instruction

- Passenger and Cargo - Maximum : 15 kg

Quantity/Packing

: ALLOWED IATA - Cargo only

- Cargo only - Packing instruction : 863 - Cargo only - Maximum Quantity/ : 50 kg

**Packing** 

**IATA - Limited Quantites** : 5 kg **ERG-Nr** : 8L

## 15. Regulatory information

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

Safety, health and environmental : Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

**REACH Restrictions - Annex XVII** : The components of this product are not subject to restrictions. **REACH Authorisation - Annex XIV** : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

**Chemical Safety Assessment** : It has not been carried out.

## 16. Other information

Revision : Revision - See : \*

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF Sources of key data used

THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and

1999/45/EC, and amending Regulation (EC) No 1907/2006





# MATERIAL SAFETY DATA SHEET (MSDS)

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

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**End of document**