


Material Safety Data Sheet	
BARIUM HYDROXIDE (OCTAHYDRATE) LR	VERSION : 03 DATE OF ISSUE : 31-01-2022 SUPERSEDES : 02
Product Code : 12560	Page 1 of 9

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

1.1. Product identifier

Trade name : BARIUM HYDROXIDE LR OCTAHYDRATE LR
Product code : 12560
Identification of the product : BARIUM HYDROXIDE LR (OCTAHYDRATE)
CAS No : 12230-71-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3. Details of the supplier of the safety data sheet

Company identification : MOLYCHEM
 Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor,
 Mumbai – 400 002 (INDIA)
 Tel: +91 22 4066 8111, 2205 7772 .
 Fax: + 91 22 22034442.
 Email : info@molychem.net
 Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat
 Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm)

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)

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

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) : C : Corrosive
T : Toxic



R Phrase(s) :

R20 : Harmful by inhalation.

R22 : Harmful if swallowed.

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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

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 :

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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

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.

3. Composition/information on ingredients

3.1 Substances Formula : $\text{Ba}(\text{OH})_2 \cdot 8\text{H}_2\text{O}$
Molecular weight : 315.48 g/mol
CAS-No. : 12230-71-6
EC-No. : 241-234-5

Component	Classification	Concentration
Barium hydroxide		
CAS-No. 12230-71-6	Acute Tox. 4; Skin Corr.	<= 100 %
EC-No. 241-234-5	1B; H332, H302, H314	

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. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

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

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No data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given..

5.2. Special hazards arising from the substance or mixture

Barium oxide

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3. Advice for fire-fighters

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.

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.

6.3. Methods and material 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.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.


Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection.

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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

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection	: Avoid all unnecessary exposure.
Respiratory protection	: Wear approved mask.
Hand protection	: Wear protective gloves.
Skin protection	: Wear suitable protective clothing.
Eye protection	: Chemical goggles or safety glasses.
Others	: When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Physical state	solid
b) Color	white
c) Odor	No data available
d) Melting point/freezing point	Melting point/range: 78 °C
e) Initial boiling point and boiling range	No data available
f) Flammability (solid, gas)	The product is not flammable.
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	Not applicable
i) Autoignition temperature	No data available

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j) Decomposition temperature	No data available
k) pH	12.5 at 50 g/l at 20 °C
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water	solubility soluble
n) Partition coefficient: n-octanol/water	No data available
o) Vapor pressure	No data available
p) Density	2.180 g/cm ³
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none

9.2. Other information

Bulk density ca.900 - 1.100 kg/m³

10. Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3. Possibility of hazardous reactions

Exothermic reaction with:
hydrogen sulphide
acids

10.4. Conditions to avoid

no information available

10.5. Incompatible materials

Light metals

10.6. Hazardous decomposition products

In the event of fire: see section 5

11. Toxicological information


11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Harmful if inhaled.
Skin corrosion/irritation	: Causes severe skin burns.

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Serious eye damage/irritation	: Assumed to cause serious eye damage
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	Not applicable
Potential adverse human health effects and symptoms	: Harmful if swallowed

12. Ecological information

12.1. Toxicity

No data available

12.2. Persistence - 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


13. Disposal considerations

13.1. Waste treatment methods


No data available

14. Transport information

14.1. UN number

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ADR/RID: 3262	IMDG: 3262	IATA: 3262
14.2. UN proper shipping name		
ADR/RID	: CORROSIVE SOLID, TOXIC, N.O.S. (Barium hydroxide)	
IMDG	: CORROSIVE SOLID, TOXIC, N.O.S. (Barium hydroxide)	
IATA	: CORROSIVE SOLID, TOXIC, N.O.S. (Barium hydroxide)	
14.3. Transport hazard class(es)		
ADR/RID: 8	IMDG: 8	IATA: 8
14.4 Packaging group		
ADR/RID: II	IMDG: II	IATA: II
14.5 Environmental hazards		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6 Special precautions for user		
Tunnel restriction code	: (E)	
Further information	: No data available	
<u>15. Regulatory information</u>		
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.		
Authorisations and/or restrictions on use		
Other regulations		
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.		
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		
<u>16. Other information</u>		
Abbreviations and acronyms :		
PBT: persistent, bioaccumulative and toxic.		
vPvB: very persistent and very bioaccumulative		
Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF 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		
Further information : None.		
In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008 DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.		

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