



<a href="#">Barium Hydroxide</a>		<a href="#">Pricing &gt;</a>
Linear Formula	Ba(OH) <sub>2</sub>	
Pubchem CID	28387	
MDL Number	MFCD00003443	
EC No.	241-234-5	
IUPAC Name	barium(2+) dihydroxide	
Beilstein/Reaxys No.	N/A	
SMILES	[Ba+2].[OH-].[OH-]	
Inchl Identifier	InChI=1S/Ba.2H2O/h;2*1H2/q+2;;/p-2	
Inchl Key	RQPZNPYLPFFXCP-UHFFFAOYSA-L	
Signal Word	Danger	
Hazard Statements	H302-H314	
Hazard Codes	C	
Risk Codes	20/22-34	
Safety Statements	26-36/37/39-45	
RTECS Number	CQ9200000	
Transport Information	UN 3262 8/PG 2	
WGK Germany	3	
GHS Pictograms	<a href="#">GHS05 Corrosive</a>  <a href="#">GHS08 Health Hazard</a> 	

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## SAFETY DATA SHEET

Date Accessed: 05/04/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #17194-00-2

**Relevant identified uses of the substance:**  
Scientific research and development

Supplier details:  
American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:  
Domestic, North America +1 800-424-9300  
International +1 703-527-3887

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## SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview  
OSHA Hazards  
Target Organ Effect, Toxic by ingestion, Corrosive  
Target Organs  
Heart, Nerves., Kidney, Gastrointestinal tract, Bone marrow, Spleen., Liver  
GHS Label elements, including precautionary statements



Pictogram  
Signal word Danger  
Hazard statement(s)  
H302 + H332 Harmful if swallowed or if inhaled.  
H314 Causes severe skin burns and eye damage.  
Precautionary statement(s)  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P305 + P351 + IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if P338 present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/ physician.  
HMIS Classification  
Health hazard: 3  
Chronic Health Hazard: \*  
Flammability: 0  
Physical hazards: 0  
NFPA Rating  
Health hazard: 3

Fire: 0  
Reactivity Hazard: 0  
Potential Health Effects  
Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.  
Skin May be harmful if absorbed through skin. Causes skin burns.  
Eyes Causes eye burns.  
Ingestion Toxic if swallowed. Causes burns.

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula :  $\text{H}_2\text{BaO}_2$   
Molecular Weight : 171.34 g/mol  
CAS-No. EC-No. Index-No. Concentration  
Barium hydroxide  
17194-00-2 241-234-5 – –

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### **SECTION 4. FIRST AID MEASURES**

General advice  
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.  
If inhaled  
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.  
In case of skin contact  
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.  
In case of eye contact  
Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
If swallowed  
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.  
Consult a physician.

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### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters  
Wear self contained breathing apparatus for fire fighting if necessary.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Evacuate personnel to safe areas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust.

Keep in suitable, closed containers for disposal.

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## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Air sensitive. Keep in a dry place.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Components with workplace control parameters

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the

sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and

approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection  
Face shield and safety glasses  
Skin and body protection  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Hygiene measures  
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Form powder  
pH 12.5 at 50 g/l at 20 °C (68 °F)  
Melting point > 300 °C (> 572 °F) – lit.  
Boiling point no data available  
Flash point not applicable  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Density 2.2 g/mL at 25 °C (77 °F)  
Water solubility no data available

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## **SECTION 10. STABILITY AND REACTIVITY**

Chemical stability  
Stable under recommended storage conditions.  
Conditions to avoid  
no data available  
Materials to avoid  
acids, Strong oxidizing agents  
Hazardous decomposition products  
Hazardous decomposition products formed under fire conditions. – Barium oxide

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Acute toxicity  
LD50 Oral – rat – 308 mg/kg  
Skin corrosion/irritation  
Serious eye damage/eye irritation  
no data available  
Respiratory or skin sensitization  
no data available  
Germ cell mutagenicity  
no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

no data available

Specific target organ toxicity – single exposure  
(Globally Harmonized System)

no data available

Specific target organ toxicity – repeated exposure  
(Globally Harmonized System)

no data available

#### Aspiration hazard

no data available

#### Potential health effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes

and upper respiratory tract.

Ingestion Toxic if swallowed. Causes burns.

Skin May be harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

#### Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and

skin., Cough, Shortness of breath, Headache, Nausea

#### Additional Information

RTECS: CQ9200000

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## SECTION 12. ECOLOGICAL INFORMATION

#### Toxicity Persistence and degradability

##### Bioaccumulative potential

no data available no data available no data available

##### Mobility in soil PBT and vPvB assessment Other

adverse effects

no data available no data available no data available

May be harmful to aquatic organisms due to the shift of the pH.

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

### Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

### DOT (US)

UN-Number: 3262 Class: 8 Packing group: II

Proper shipping name: Corrosive solid, basic, inorganic, n.o.s. (Barium hydroxide)

Marine pollutant: No

Poison Inhalation Hazard: No

### IMDG

UN-Number: 3262 Class: 8 Packing group: II EMS-

No: F-A, S-B

Proper shipping name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Barium hydroxide)

Marine pollutant: No

### IATA

UN-Number: 3262 Class: 8 Packing group: II

Proper shipping name: Corrosive solid, basic, inorganic, n.o.s. (Barium hydroxide)

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## **SECTION 15. REGULATORY INFORMATION**

### OSHA Hazards

Target Organ Effect, Toxic by ingestion, Corrosive

### DSL Status

All components of this product are on the Canadian DSL list.

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

Barium hydroxide CAS-No.

17194-00-2

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard  
Massachusetts Right To Know Components  
No components are subject to the Massachusetts  
Right to Know Act.  
Pennsylvania Right To Know Components  
Barium hydroxide CAS-No.  
17194-00-2  
New Jersey Right To Know Components  
Barium hydroxide CAS-No.  
17194-00-2  
California Prop. 65 Components  
This product does not contain any chemicals known to  
State of California to cause cancer, birth defects, or  
any  
other reproductive harm.

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## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No.  
1907/2006 (REACH). The above information is  
believed to be correct but does not purport to be all  
inclusive and shall be used only as a guide. The  
information in this document is based on the present  
state of our knowledge and is applicable to the  
product with regard to appropriate safety precautions.  
It does not represent any guarantee of the properties  
of the product. American Elements shall not be held  
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