SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Barium Hydroxide

Product Number: All applicable American Elements product codes, e.g. BA-OH-02 , BA-OH-03 , BA-OH-04 , BA-OH-05

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:
+1 800-424-9300

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : H2BaO2
Molecular Weight : 171.34 g/mol
CAS-No. EC-No. Index-No. Concentration
Barium hydroxide
17194–00–2 241–234–5 – –

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.

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.

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.

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.

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.

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

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

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

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.

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.

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)

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.

SECTION 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 liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.