



Silver Fern Chemical, Inc.  
Safety Data Sheet  
Barium Hydroxide Octahydrate

Revision Date: 05/30/2025

**Section 1. Identification**

**Product identifier**

<b>Product Identity</b>	Barium Hydroxide Octahydrate
<b>Other means of identification</b>	Barium Dihydroxide Octahydrate, Dihydroxybarium Octahydrate

**Relevant identified uses of the substance or mixture and uses advised against**

See Technical Data Sheet.

**Details of the supplier of the safety data sheet**

<b>Company Name</b>	Silver Fern Chemical, Inc. 121 W. De La Guerra Street, Suite B Santa Barbara, CA 93101 USA Customer Service: 1-866-282-3384 / info@silverfernchemical.com Website - www.silverfernchemical.com
<b>Emergency 24 hour Emergency Telephone No.</b>	Emergency telephone number Infotrac: 1-800-535-5053; Outside USA & Canada +1-352- 323-3500
<b>Customer Service:</b>	

**Section 2. Hazard(s) identification**

**Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)**

The substance is not classified according to the OSHA Hazcom or WHMIS regulations.

**Label elements**

The substance is not classified according to the OSHA Hazcom or WHMIS regulations.

**[Prevention]**

No GHS prevention statements



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**[Response]**

No GHS response statements

**[Storage]**

No GHS storage statements

**[Disposal]**

No GHS disposal statements

**Other hazards**

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per US or Canadian regulations.

**Section 3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Barium hydroxide octahydrate CAS Number: 12230-71-6 Synonyms: No available information	80 - 100		No data available

The actual concentration or concentration range is withheld as a trade secret.

\*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

**Section 4. First aid measures**

**Description of first aid measures**

**General** In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

**Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position



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- and obtain immediate medical attention. Give nothing by mouth.
- Eyes** Rinse with plenty of clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

**Most important symptoms and effects, both acute and delayed**

**Overview** No specific symptom data available.  
No chronic toxicity or long term toxicity information available. Treat symptomatically. See section 2 for further details.

**Section 5. Fire-fighting measures**

**Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Unsuitable extinguishing media: Do not use; water jet.

**Special hazards arising from the substance or mixture**

Hazardous decomposition: No hazardous decomposition data available.

**Advice for fire-fighters**

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

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## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).  
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### Environmental precautions

Do not allow spills to enter drains or waterways.

### Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

## Section 7. Handling and storage

### Precautions for safe handling

Handle containers carefully to prevent damage and spillage.  
See section 2 for further details. - [Prevention]

### Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information  
See section 2 for further details. - [Storage]

### Specific end use(s)



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No available information

**Section 8. Exposure controls / personal protection**

**Control parameters**

**Exposure Limits**

CAS No.	Ingredient	Source	Value
12230-71-6	Barium hydroxide octahydrate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

**Exposure controls**

**Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

**Eyes** Protective safety glasses recommended

**Skin** Avoid skin contact. Protective gloves recommended.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

**Section 9. Physical and chemical properties**

**Information on basic physical and chemical properties**

**Physical State**  
**Color**

White, Granular  
White



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<b>Odor</b>	No available information
<b>Melting point / freezing point</b>	No available information
<b>Initial boiling point and boiling range</b>	780 °C (- 8H <sub>2</sub> O)
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> No available information <b>Upper Explosive Limit:</b> No available information
<b>Flash Point</b>	No available information
<b>Auto-ignition temperature</b>	No available information
<b>Decomposition temperature</b>	No available information
<b>pH</b>	No available information
<b>Viscosity (cSt)</b>	No available information
<b>Solubility in Water</b>	Miscible
<b>Partition coefficient n-octanol/water (Log Kow)</b>	No available information
<b>Vapor pressure (Pa)</b>	No available information
<b>Relative Density</b>	2.18 @ 16°C
<b>Vapor Density</b>	No available information
<b>Evaporation rate (Ether = 1)</b>	No available information
<b>Oxidising properties</b>	No available information
<b>Explosive properties</b>	No available information

**Other information**

No other relevant information.

**Section 10. Stability and reactivity**

**Reactivity**

Hazardous Polymerization will not occur.

**Chemical stability**

Stable under normal circumstances.

**Possibility of hazardous reactions**

No available information



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**Conditions to avoid**

Avoid high temperatures and contact with incompatible material

**Incompatible materials**

No available information

**Hazardous decomposition products**

No hazardous decomposition data available.

**Section 11. Toxicological information**

**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Barium hydroxide octahydrate - (12230-71-6)	No data available.	No data available.	No data available.	No data available.	No data available.

**Carcinogen Data**

CAS No.	Ingredient	Source	Value
12230-71-6	Barium hydroxide octahydrate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable



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Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

**Possible routes of entry:**No available information

**Symptoms and effects, both acute and delayed:**

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

**Section 12. Ecological information**

**Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Barium hydroxide octahydrate - (12230-71-6)	No data available.	No data available.	No data available.

**Persistence and degradability**

There is no data available on the preparation itself.

**Bioaccumulative potential**

No available information

**Mobility in soil**

No available information

**Results of PBT and vPvB assessment**

This product contains no PBT/vPvB/vPvM chemicals.

**Other adverse effects**

No available information





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**Section 13. Disposal considerations**

**Waste treatment methods**

Observe all federal, provincial and local regulations when disposing of this substance.

**Section 14. Transport information**

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>UN number</b>	UN3262	UN3262	UN3262
<b>UN proper shipping name</b>	UN3262, Corrosive solid, basic, inorganic, n.o.s. (CHEMICAL NAME), 8, III	Corrosive solid, basic, inorganic, n.o.s. (CHEMICAL NAME)	Corrosive solid, basic, inorganic, n.o.s. (CHEMICAL NAME)
<b>Transport hazard class(es)</b>	<b>Class:</b> 8 <b>Sub Class:</b> Not Applicable	<b>Class:</b> 8 <b>Sub Class:</b> Not Applicable	<b>Class:</b> 8 <b>Sub Class:</b> Not Applicable
<b>Packing group</b>	III	III	III

**Environmental hazards**

IMDG Marine Pollutant: No;  
**Special precautions for user**

No available information

**Section 15. Regulatory information**

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)



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**Toxic Substance Control Act (TSCA)**

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0012230-71-6	Barium hydroxide octahydrate	No		

The following flags are used:

- Active - indicates commercial status designation of active
- E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.
- F - indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P - indicates a commenced Premanufacture Notice (PMN) substance.
- R - indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S - indicates a substance that is identified in a final Significant New Uses Rule.
- SP - indicates a substance that is identified in a proposed Significant New Uses Rule.
- T - indicates a substance that is the subject of a final Section 4 test rule under TSCA.
- UVCB Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials
- XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
- Y1 - indicates a polymer that has a number-average molecular weight greater than 1,000 and that was exempt under the 1984 polymer exemption rule.
- Y2 - indicates a polymer that is a polyester and that was exempt under the 1984 polymer exemption rule.

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 Label Warning:**

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Mass RTK Substances (>1%) :**

(No Product Ingredients Listed)

**New Jersey RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Pennsylvania RTK Substances (>1%) :**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**OSHA Process Safety Management Standard Highly Hazardous Chemicals, Toxics and Reactives:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US EPA List of Regulated Substances under the Risk Management Plan (RMP) Program:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



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**US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA List II or Essential Chemicals:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**U.S. - DEA - Exempt Chemical Mixtures - List 1 and 2:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**US DHS Chemical Facility Anti-Terrorism Standards (CFATS):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 311/312 Chemicals and RQs:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

<b>Section 16. Other information</b>
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**DISCLAIMER OF RESPONSIBILITY**

The information on 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. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.



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The full text of the phrases appearing in section 3 is:

Not Applicable

**End of Document**