# SAFETY DATA SHEET

Section 1 Chemical Product and Company Information	Page E1 of E2
80 Northwest Blvd. Nashua, NH 03063 (800) 225-3739	CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.
Product BARIUM HYDROXIDE, OCTAHYDRATE	
Synonyms Barium Hydrate / Barium Octahydrate	
Section 2 Hazards Identification	
Signal word: DANGER Pictograms: GHS05 / GHS07 Target organs: Heart, Nerves, Kidneys, Gastrointestinal tract, Bone marrow, Spleen, Liver GHS Classification: Acute toxicity, oral (Category 4) Acute toxicity, oral (Category 4) Skin corrosion (Category 1B) Eye corrosion (Category 1B) Eye corrosion (Category 1) GHS Label information: Hazard statement: H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H332: Harmful if inhaled.	<ul> <li>Precautionary statement:</li> <li>P260: Do not breathe dust.</li> <li>P264: Wash hands thoroughly after handling.</li> <li>P270: Do not eat, drink or smoke when using this product.</li> <li>P271: Use only outdoors or in a well-ventilated area.</li> <li>P280: Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> <li>P312: Call a POISON CENTER or doctor if you feel unwell.</li> <li>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P310: Immediately call a POISON CENTER or doctor.</li> <li>P405: Store locked up.</li> <li>P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.</li> </ul>

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

ction 3 Composition / Information on Ingredients					
Chemical Name	CAS #	%	EINECS		
Barium hydroxide, octahydrate	12230-71-6	90-100%	241-234-5		
Section 4 First Aid Measures					

**INGESTION:** HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: TOXIC IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES BURNS. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: HARMFUL IF ABSORBED THROUGH SKIN. CAUSES BURNS. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

### Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

## Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
	Barium and soluble compounds, as Ba	TWA: 0.5 mg/m <sup>3</sup> (A4)	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>			

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9	Physical & Chemical Properties						
Appearance: Solid. White, crystalline powder       E         Odor: No odor.       F         Odor threshold: Data not available.       E         pH: Data not available.       V         Melting / Freezing point: Data not available       V         Boiling point: Data not available       R		Evaporation rate ( = 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.18 Solubility(ies): Moderately soluble in water.		Auto-igniti			
Section 10	Stability & Reactivity						
Conditions to avoid: A	Chemical stability:       Stable       Hazardous polymerization:       Will not occur.         Conditions to avoid:       Air, dusting, and incompatible materials.       Incompatible materials:       Air, dusting, and incompatible materials.         Incompatible materials:       Acids, strong oxidizers, and chlorinated rubber.       Corrosive to metals such as zinc.						
Hazardous decompos	ition products: Barium oxide.						
Section 11	Toxicological Information						
Acute toxicity: Oral-rat LD50: 308 mg/kg Skin corrosion/irritation: Skin-rabbit - Highly irritating. Serious eye damage/irritation: Eyes-rabbit - Highly irritating. Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available 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. 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. 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: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available STOT-repeated exposure: Data not available Potential health effects: Inhalation: Inhalation causes irritation to the nose, throat, and respiratory tract. Symptoms include sore throat, coughing and shortness of breath. Systemic poisoning may occur in sensitive individuals with symptoms similar to those of ingestion Ingestion: Ingestion causes severe irritation of the gastrointestinal tract, tightness in the muscles of the face and neck, vomiting, and diarrhea, abdominal pain, muscular tremors, anxiety, weakness, labored breathing, cardiac irregularity, convulsions, and death from cardiac and respiratory failure. Skin: Contact may cause irritation and/or burns. Eyes: Contact may cause irritation and/or burns. Signs and symptoms of exposure: Exposure: Exposure: Barton and/or burns.							
Section 12 Ecological Information							
Toxicity to fish: No data available         Toxicity to daphnia and other aquatic invertebrates: No data available         Toxicity to algae: No data available         Persistence and degradability: No data available         Mobility in soil: No data available         Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.							
Section 13 Disposal Considerations							
These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.							
Section 14 Transport Information (US DOT / CANADA TDG)							
UN/NA number:       UN2923       Shipping name:       Corrosive solid, toxic, n.o.s., (Barium hydroxide, octahydrate)         Hazard class:       8, (6.1)       Packing group:       III       Reportable Quantity:       No         Exceptions:       Limited quantity equal to or less than 5 Kg       2012 ERG Guide #       154							
Section 15 Regulatory Information							
	be listed if the CAS number for the		,	5054	DOI		
Component		TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Barium hydroxide		Listed	Not listed	D002, D005	Listed	Not listed	

#### Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.