



BARIUM SULFATE

MSDS

1. Product Identification

Synonyms: Naturally occurring barium sulfate.
Chemical Name: Barium Sulfate
Product Codes: ExWATE

Chemical Formula: BaSO₄

2. Composition / Information on the Components

Chemical Name: Barium Sulfate

CAS No.: 7727-43-7 (Concentration: 83-88%)

Hazardous Identification Information: There are no minor components that are not part of the make-up matrix of these products. The amount of respirable silica is less than 0.1% at 10 microns.

3. Hazard Identification

Routes of Entry: INHALATION - EYE CONTACT – SKIN CONTACT – INGESTION
Carcinogenic Status: NONE
Target Organs: EYE, LUNG
Health Effects-Inhalation: Inhalation of fine barite dust may cause irritation of the nose and throat by mechanical action.
Health Effects-Eye: Direct contact with dust may cause mechanical irritation of the eyes.
Health Effects-Skin: Direct contact may cause slight dryness or may cause mild irritation.
Health Effects-Ingestion: Barite is considered to be relatively not-toxic due to non-absorption.
Other Health Warnings: NA

4. First Aid Measures

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Skin: Wash with soap and water. Get medical attention if irritation persists.
Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
Notes to Physician: Not Applicable

5. Fire Fighting Measures

Flash Point/Range: Not Determined
Autoignition Temperature: Not Determined
Flammability Limits in Air - Upper (%): Not Determined
Special Exposure Hazards: Not applicable.
NFPA Ratings: Health 1, Flammability 0, Reactivity 0

Flash Point Method: Not Determined
Flammability Limits in Air - Lower (%): Not Determined
Fire Extinguishing Media: All standard firefighting media.
Special Protective Equipment for Fire Fighters: Not applicable.
HMIS Ratings: Flammability 0, Reactivity 0, Health 1

6. Accidental Release Measures

Personal Precautionary Measures: Use appropriate protective equipment. Avoid creating and breathing dust.
Environmental Precautionary Measures: None known.
Procedure for Cleaning / Absorption: Collect using dustless method and hold for appropriate disposal. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage and disposal.

7. Handling and Storage

Handling Precautions: This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH certified, European Standard En 149, or equivalent respirator when using this product. Material is slippery when wet.
Storage Information: Store in a cool, dry location. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.

8. Exposure Controls / Personal Protection

Engineering Controls: Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in Section 2.
Respiratory Protection: Wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product.
Hand Protection: Normal work gloves.
Skin Protection: Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.
Eye Protection: Wear safety glasses or goggles to protect against exposure.
Other Precautions: None known.

9. Physical and Chemical Properties

Appearance: Powder – white to tan in color.
Solubility: Insoluble in water.
% Volatiles by volume @ 21C (70F): 0
Melting Point: 2876 degrees Fahrenheit
Vapor Pressure (mm Hg): No information found.

Odor: Odorless.
pH: No information found.
Boiling Point: Not applicable.
Vapor Density (Air=1): No information found.
Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.
Decomposition Products: Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
Hazardous Polymerization: Will not occur.
Conditions to Avoid: None anticipated.
Incompatibility (Materials to Avoid): Not Applicable

11. Toxicological Information

Acute Toxicity: Tumorigenic data (RTECS), Mutagenic data (RTECS)
Chronic Toxicity/Carcinogenicity: Inhaled fine dusts of barium sulfate form harmless nodular granules in the lung (baritosis). Baritosis produces no symptoms of bronchitis or emphysema. Lung functioning is not affected, although some patients complain of dyspnea upon exertion.
Genotoxicity: None
Reproductive/Developmental Toxicity: None

12. Ecological Information

Mobility (Water/Soil/Air): Not determined **Persistence/Degradability:** Not applicable **Bio-accumulation:** Not Determined

Ecotoxicological Information

Acute Fish Toxicity: TLM96: 7500 ppm (Oncorhynchus mykiss) **Acute Crustaceans Toxicity:** Not determined
Acute Algae Toxicity: Not determined **Chemical Fate Information:** Not determined

13. Disposal Considerations

Disposal Method: Bury in a licensed landfill according to federal, state, and local regulations.
Contaminated Packaging: Follow all applicable national or local regulations.

14. Transport Information

Land Transportation: DOT: Not restricted **Canadian TDG:** Not restricted **ADR:** Not restricted
Air Transportation: ICAO/IATA: Not restricted
Sea Transportation: IMDG: Not restricted
Other Shipping Information: Labels: None

15. Regulatory information

US Regulations

US TSCA Inventory: All components listed on inventory.
EPA SARA Title III Extremely Hazardous Substances: Not applicable
EPA SARA (311,312) Hazard Class: Acute Health Hazard and Chronic Health Hazard
EPA SARA (313) Chemicals: This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity For This Product: Not applicable.
EPA RCRA Hazardous Waste: If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
California Proposition 65: The California Proposition 65 regulations apply to this product.

MA Right-to-Know Law: One or more components listed. **PA Right-to-Know Law:** One or more components listed.
NJ Right-to-Know Law: One or more components listed. **WHMIS Hazard Class:** D2A Very Toxic Materials (Crystalline silica)
Canadian Regulations Canadian DSL Inventory: All components listed on inventory.

16. For Further Information Contact

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Date of Revision: 03/2005
For Emergency Information Call: 281-872-3732 (24 hours)

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