



SILVER FERN
CHEMICAL INC

SILVER FERN CHEMICAL INC.

Safety Data Sheet

Barium Sulfate

SECTION 1. IDENTIFICATION

Product Identifier Barium Sulfate
Other Means of Identification BARITE
Product Family Weighting Agent
Recommended Use Drilling Fluid Additive.
Supplier Silver Fern Chemical, 2226 Queen Anne Ave N. Seattle WA 98109,
www.silverfernchemical.com, ph 866-2823376, info@silverfernchemical.com
Emergency Phone No. Infotrac: +1-800-535-5053; Outside USA & Canada +1-352-323-3500

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) - Category 4; Acute toxicity (Inhalation) - Category 4; Carcinogenicity - Category 1A



SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | % | Other Identifiers |
|----------------------------|------------|--------|-------------------|
| Barium sulfate | 7727-43-7 | 70-100 | |
| Kaolin | 1332-58-7 | 3-7 | |
| Crystalline Silica, Quartz | 14808-60-7 | 1-5 | |

Notes

Small amounts (less than reportable quantities) of respirable crystalline silica are present in this product.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Monitor for respiratory distress. If cough or difficulty breathing develops, evaluate for respiratory tract irritation, bronchitis or pneumonia.

Skin Contact

Wash contacted skin with soap and water. Launder contaminated clothing before re-use.

Eye Contact

Rinse with clean water for 15 minutes. Get medical attention.

Ingestion

If swallowed, have the conscious victim drink plenty of water. Never give anything by mouth to an unconscious or convulsing victim. Get medical attention.

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Immediate Medical Attention and Special Treatment

Target Organs

Eyes, skin and respiratory system.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Not combustible. Use extinguishing agents compatible with product and suitable for surrounding fire.

Specific Hazards Arising from the Chemical

Non-flammable; does not support combustion.

Special Protective Equipment and Precautions for Fire-fighters

This product will not act as fuel to a fire.

A full-body encapsulating chemical protective suit with positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Avoid contact with spilled material.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Collect material using shovels, vacuums or other methods that will not generate significant dust exposures to workers. If spill is large, keep public away from spill area. Reprocess, if possible. If not, collect in container appropriate for disposal method.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in a manner that will minimize generation of dust. Avoid breathing dust. Ground containers during transfer of product. Compressed air should not be used for cleaning these dusts. Wash before eating, using the washroom or smoking. Launder contaminated clothing before re-use.

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

Conditions for Safe Storage

Keep in a dry location in closed containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

(barium sulfate)

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 10 mg/m³ (inhalation fraction)

3 mg/m³ (respirable fraction)

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. 15 mg/m³ (total dust)

5 mg/m³ (respirable fraction).

Appropriate Engineering Controls

Airborne concentrations are anticipated to be below exposure limits, however, provide adequate ventilation to control dusts below exposure limits listed above. Emergency eyewash station should be available in the vicinity of potential splash exposure.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety glasses with face shield to prevent contact with eyes.

Skin Protection

Wear protective clothing as required to prevent contact. Wear gloves (leather) to prevent contact with powder.

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Respiratory Protection

Wear a NIOSH-approved respirator with dust cartridges if dust concentrations approach the listed exposure limits.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|--|---|
| Appearance | Beige - grey powder. Particle Size: Not available |
| Odour | Odourless |
| pH | 7.0 - 9.5 |
| Melting Point/Freezing Point | 2838 °F (1559 °C) (melting); Not available (freezing) |
| Initial Boiling Point/Range | Not applicable |
| Flash Point | Not available |
| Evaporation Rate | Not applicable |
| Flammability (solid, gas) | Not available |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | Not applicable |
| Vapour Density (air = 1) | Not applicable |
| Relative Density (water = 1) | 4.1 - 4.2 |
| Solubility | Practically insoluble (less than 0.1%) in water |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | Not applicable |
| Other Information | |
| Physical State | Solid |
| Molecular Formula | BaSO ₄ |
| Molecular Weight | Not available |
| Bulk Density | 107 - 135 lb/ft ³ (1714 - 2162 kg/m ³) |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Water, moisture or humidity.

Incompatible Materials

Aluminum in high temperatures can cause explosions. Barium sulfate is also reported to be incompatible with phosphorus.

Hazardous Decomposition Products

Irritating or toxic substances may be emitted upon thermal decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Small amounts (less than reportable quantities) of respirable crystalline silica are present in this product.

Skin Corrosion/Irritation

Contact with skin may cause slight irritation.

May cause skin irritation.

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Serious Eye Damage/Irritation

May cause slight irritation.

May cause eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Barium sulphate is considered a nuisance particulate but good industrial hygiene practices are recommended to keep dusts from becoming airborne.

May be irritating to the upper respiratory tract. May cause inflammation of mucous membranes and nosebleeds.

Ingestion

Swallowing this product is not expected to cause toxic effects.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Long-term exposure to products containing crystalline silica may cause silicosis. Avoid inhalation.

May cause long-term inflammation of mucous membranes of the eyes and respiratory tract. Prolonged and heavy exposures of Barium Sulfate may cause Baritosis, a benign pneumoconiosis. This benign pneumoconiosis does not result in impairment of ventilatory function, although signs of mild bronchial irritation may occur.

Respiratory and/or Skin Sensitization

Not considered a sensitizer.

Carcinogenicity

Not listed as a carcinogen by IARC, NTP, ACGIH.

Reproductive Toxicity

Sexual Function and Fertility

Not considered a reproductive hazard.

Germ Cell Mutagenicity

Not considered a mutagenic.

No information was located for: Development of Offspring, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

No ecotoxicity or environmental fate data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

This product should be considered for recycling and re-use. If the product is not being recycled or re-used, dispose of in accordance with local, provincial/state and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under US DOT Regulations.

Special Precautions for User Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

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All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

Barium Sulfate is NOT listed on:

- SARA 302/304/311/312 (extremely hazardous substances)
- SARA 302/304 (emergency planning and notification)
- SARA 302/304/311/312 (hazardous substances)
- Clean Water Act 307 and 311
- Clean Air Act 112 (accidental release prevention)
- Clean Air Act 112 (flammable substances)
- Clean Air Act 112 (toxic substances)

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 0** **Flammability - 0** **Instability - 0**

SDS Prepared By Bri-Chem Supply Ltd

Date of Preparation August 05, 2015

Disclaimer This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.