SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: BARA 200, CIMWATE 200, POLYWATE 325, BARAWEIGHT 50
Material Uses: Weighting Material and Filler
Generic Description: Barium Sulfate, barite, barytes.
Manufacturer: CIMBAR Performance Minerals
    49-0 Jackson Lake Rd.\ Chatsworth, Ga. 30705
    Emergency Phone: (800) 852-6868, ext. 1108

2. HAZARD IDENTIFICATION

Signal Word: Warning
GHS Classification: Eye, skin, respiratory irritant.
OSHAMSHA Hazards: Nuisance Dust.
Target Organs: Eye, lungs.
Health Status: This material is classified as hazardous (nuisance dust) under OSHA regulations in the USA, the WHMIS Controlled Product Regulation in Canada and the NOM-018-STPS-2000 in Mexico.
Carcinogenic Status: None
Target Organs: Lungs
Routes of Entry: Skin, eye, inhalation.
Health Effect-Eyes: Direct contact with dust may cause mechanical irritation.
Health Effect-Skin: Direct contact may cause slight dryness or irritation.
Health Effect-Ingestion: None.
Health Effect-Inhalation: Inhalation of fine barite dust may cause irritation of the nose and throat by mechanical action. Repeated or prolonged exposure to the substance could cause chronic target organ damage.

3. COMPOSITION/INFORMATION ON THE COMPONENTS

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>CAS#</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium Sulfate (BaSO4)</td>
<td>7727-43-7</td>
<td>80-92</td>
</tr>
<tr>
<td>Strontium Sulfate (SrSO4)</td>
<td>7759-02-6</td>
<td>2.0</td>
</tr>
<tr>
<td>Silica (Total) (SiO2)</td>
<td>99439-28-8</td>
<td>2.0</td>
</tr>
<tr>
<td>Calcium Oxide (CaO)</td>
<td>1305-78-8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First Aid-Eyes: Wash eyes with large amounts of water or normal saline solution. If irritation or redness develops, seek medical attention.
First Aid-Skin: Apply common skin moisturizers to relieve dryness. Irritations are uncommon; however, if irritation or redness develops, seek medical attention. Broken skin can be cleansed with mild soap and water.
First Aid-Ingestion: Barite is considered to be relatively non-toxic due to non-absorption.
First Aid-Inhalation: Remove from exposure to fresh air. If breathing has stopped, perform artificial respiration and get medical attention immediately. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.
Emergency Eye Wash: When there is a possibility that an employee’s eyes may be exposed to bulk quantities or high concentrations of airborne dust of this substance, the employer should provide an eye wash fountain within the immediate work area for emergency.
5. FIRE FIGHTING MEASURES

Extinguishing Media: Not readily combustible. Select extinguishing agent appropriate to other materials involved.
Special Hazards of Product: Avoid the formation of dust clouds.
Protective Equipment for Fire-fighting: No specific measures necessary

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Use appropriate protective equipment. Avoid creating and breathing dust.
Environmental Precautionary Measures: None known.
Cleaning/Absorption Procedures: 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: Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation and appropriate dust respirator (N95 minimum). Material can be slippery when wet.

Storage: Store in original containers and in dry areas. Do not reuse empty containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Engineering methods to prevent or control exposure are preferred. If they are not effective, then suitable personal protective should be used.
Personal Protective Equipment: If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by a qualified professional based on the specific application of this product.
Respiratory Protection: Wear a NIOSH certified, European EN 149 or equivalent dust respirator when using this product.
Hand Protection: Protective gloves are not required, but may be worn to prevent skin dryness or irritation. Skin Protection: Wear appropriate clothing 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid (Powder.)
Color: Pink to tan to gray
Odor: Odorless.
Specific Gravity: 4.1-4.2
Bulk Density (lbs/gal): 135
Melting/freezing point: 1580 deg. C (2876 deg F)
Solubility in water: Insoluble in Water
MOHS Hardness: 2.5-3.5

10. STABILITY AND REACTIVITY

Stability: Product is stable.
Hazardous Polymerization: Will not occur. Conditions to Avoid: None known. Materials to Avoid: None known.
Hazardous Decomposition Products: Amorphous silica may transform at elevated temperatures to tridymite (870 C) or cristobalite (1470 C).
### 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 function in not affected, although some patients complain of dyspnea upon exertion.
- **Genotoxicity:** Not determined.
- **Reproductive/Developmental Toxicity:** Not determined.

### 12. ECOLOGICAL INFORMATION

- **Mobility:** The product is insoluble in water
- **Persistence/Degradability:** No relevant studies identified
- **Bioaccumulation:** No relevant studies identified
- **Ecotoxicity data:** Species (Daphnia magna, EC50), Period (48 hrs), Result (32 mg/l)

### 13. DISPOSAL

- **Product Disposal:** Dispose of in accordance with all applicable local, state, and federal regulations. Container
- **Container Disposal:** Dispose of containers in accordance with all applicable local, state, and federal regulations.

### 14. TRANSPORT INFORMATION

- **NAERG:** Not applicable.
- **Regulatory information:**
  - Land Transportation: Not regulated by DOT, Canadian TDG, ADR.
  - Air Transportation: Not restricted by ICAO/IATA
  - Sea Transportation: Not restricted by IMDG.

### 15. REGULATORY INFORMATION

- **US Regulations:**
  - US TSCA Inventory: All components listed.
  - EPA SARA III (Extremely Hazardous Substances): Not Applicable.
  - EPA SARA 311, 312 (Hazard Class): Acute Health Hazard, 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: Not applicable.
  - EPA RCRA Hazardous Waste Classification: If product becomes a waste, it does not meet the criteria of a hazardous waste as defined by the US EPA.
  - California Prop 65: Not applicable.
  - MA Right-to-Know Law: One or more components listed. NJ Right-to-Know Law: One or more components listed. PA Right-to-Know Law: One or more components listed.

- **Canadian Regulations:**
  - Canadian DSL Inventory: All components listed on inventory.

- **International lists:**
  - This product and its ingredients are listed on national inventories, or is exempted from being listed,
  - Australia (AICS), in Europe (EINECS/ELINC), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969)
16. OTHER INFORMATION\CONTACT

Hazardous Material Information System (HMIS):
Health Hazard-1 *(slight, chronic), Flammability Hazard-0 minimal, Reactivity Hazard-0 minimal, Personal protection-E glasses, gloves dust respirator
National Fire Protection Association (NFPA): Health (1), Fire Hazard (1), Physical Hazard (0)

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