MATERIAL SAFETY DATA SHEET

Barium Sulfate Suspension Products

Date Revised: February 25, 2000

SECTION I - PRODUCT IDENTIFICATION

Product Name: Barium Sulfate Suspension Products
Manufacturer: E-Z-EM Canada, Inc. 11100 Colbert, Anjou, Quebec H1J 2M9, Canada
Emergency/Information Contact: Judy Hauser
Emergency/Information Telephone: (516)333-8230 extension 377

SECTION II - COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>% (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium Sulfate (can contain silica - quartz)</td>
<td>7727-43-7</td>
<td>Proprietary</td>
</tr>
<tr>
<td></td>
<td>(14808-60-7)</td>
<td>(0.1 - 1% of barium sulfate)</td>
</tr>
<tr>
<td>Suspending and Dispersing Agents</td>
<td></td>
<td>Proprietary</td>
</tr>
<tr>
<td>May contain Sorbitol</td>
<td>50-70-4</td>
<td>Proprietary</td>
</tr>
<tr>
<td>May contain Poligeenan</td>
<td>53973-98-1</td>
<td>&gt;0.1%</td>
</tr>
<tr>
<td>May contain Sodium Saccharin</td>
<td>128-44-9</td>
<td>&lt;0.1%</td>
</tr>
</tbody>
</table>

SECTION III - PHYSICAL DATA

Boiling Point: Not Tested
Specific Gravity (H₂O = 1): Range: 1 - 2.75 g/ml
Vapor Pressure (mm Hg): Not Tested
Melting Point: Not Tested
Vapor Density (Air = 1): Not Tested
Evaporation Rate (Butyl Acetate = 1): Not Tested
Solubility in Water: Insoluble
Appearance & Odor: White to Off-white or tan suspension with no odor or slightly fruity or vanillin odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (method): Not Tested
Flammable Limits: UEL - N/A LEL - N/A

Fire Extinguishing Media: Use extinguishing media that is suitable for surrounding fire.

Special Fire Fighting Procedures: Firefighters should wear full protective equipment and self-contained breathing apparatus with full face piece.

Unusual Fire & Explosion Hazards: None known

Toxic Gases Emitted: sulfur dioxide

SECTION V - REACTIVITY DATA

Stability: Stable
Conditions to avoid: none documented

Incompatible materials: Phosphorus, Aluminum

Decomposition products: Not Tested
Hazardous Polymerization: Will not occur

SECTION VI - HEALTH HAZARD DATA

Permissible Exposure Limit (PEL) for barium sulfate:
- Total Dust - 15 mg/m³ Time Weighted Average (TWA)
- Respirable dust - 5 mg/m³ TWA

Threshold Limit Value (TLV) for barium sulfate:
- Total Dust: 10 mg/m³ TWA
- Silica - quartz, respirable dust: 0.1 mg/m³

Short-Term Exposure Limit (STEL): Not Established

Routes of Exposure: Inhalation (dust exposure is not a concern since these products are liquids), Ingestion

Health Hazards (acute and chronic): Through normal routes of entry, not expected to be a hazard.
In some cases where skin and eye contact occurs, product may cause irritation. No adverse health effects expected from chronic exposure.

SECTION VI - HEALTH HAZARD DATA contd.

Carcinogenicity: Some products contain poligeenan. IARC lists poligeenan as a Class 2B meaning it is A possibly carcinogenic to humans.\(\equiv\)
NTP: No IARC: Yes OSHA: No

Some products contain sodium saccharin which is listed by the NTP as a substance reasonably anticipated to be a carcinogen.
NTP: Yes IARC: No OSHA: No

Effects of exposure: May cause constipation. Some formulations contain sorbitol, which may cause diarrhea in some individuals. Consult label for more information.

Medical conditions generally aggravated by exposure: No information found relating to normal routes of exposure.

Emergency and First Aid procedures: Eye contact - Flush with water for at least 15 minutes.
Skin contact - wash area thoroughly with soap and water.
If ingested and person is conscious - give several glasses of water to dilute.
If irritation persists or large quantities are ingested, get medical attention.

SECTION VII - SPILL AND DISPOSAL INFORMATION

Steps to be taken in case material is released or spilled:

Wear appropriate protective equipment. Absorb spill with an absorbent and inert material, such as sand or vermiculite. Place materials in container and label properly.

Waste Disposal Procedures:

Products are not listed hazardous wastes under RCRA. Products are not likely to qualify as characteristic hazardous wastes, but any final determination depends on the specific circumstances of product usage and handling. Disposal should take place in compliance with
federal, state and local laws and regulations.

SECTION VIII - HANDLING AND STORAGE PRECAUTIONS

Store indoors in a tightly closed container, protected from extreme temperatures and potential sources of damage. Can be stored in any general chemical storage area.

Do not smoke, eat or drink while handling any chemical. Practice good industrial and personal hygiene to avoid unnecessary exposure.

SECTION IX - PROTECTIVE EQUIPMENT

Respiratory Protection: Barium sulfate liquid suspensions are not expected to require any personal respirator usage.

Ventilation: Use adequate local exhaust ventilation to keep fume levels as low as possible.

Protective Gloves: Appropriate gloves.

Eye Protection: Safety goggles or glasses.

Emergency Equipment: Always ensure there is an emergency eye wash in the area.

Disclaimer: The information contained in this Material Safety Data Sheet is believed to be correct, but does not purport to be all inclusive, and should only be used as a guide. E-Z-EM Inc. or subsidiaries of shall not be held liable for any damage resulting from the handling or contact with these products.

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