MATERIAL SAFETY DATA SHEET

Barium Sulfate Powder Products

Date Revised: June 21, 2000

SECTION I - PRODUCT IDENTIFICATION

Product Name: Barium Sulfate Powder Products

Manufacturer: E-Z-EM, Inc.

717 Main Street

Westbury, NY 11590

Emergency/Information

Contact: Judy Hauser

Emergency/Information

Telephone: (516)333-8230 extension 377

Product Codes: 310,312,312-8816,314,316,316-8816,318,340,725,735,745,750,753,

758,760,764,765,775,778,786,790,812,816,1312,1312-8816,1316,1316-8816,2212,

2216,2700,7760,7765,7772,D101

SECTION II- COMPONENTS

Barium Sulfate CAS No. % (optional)
7727-43-7 Proprietary

(can contain silica - quartz) (14808-60-7) 0.1 - 1% of barium sulfate)

Suspending and Dispersing Proprietary

Agents

Flavors and Sweeteners Proprietary

May contain Poligeenan 53973-98-1 > 0.1%

Sorbitol 50-70-4 Proprietary

May contain Sodium Saccharin 128-44-9 < 0.1%

SECTION III - PHYSICAL DATA

Boiling Point: N/A Specific Gravity ($H_2O = 1$): N/A

Vapor Pressure (mm Hg): N/A Melting Point: Not Tested

Vapor Density (Air = 1): N/A Evaporation Rate (Butyl Acetate = 1): N/A

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Solubility in Water: Insoluble

Appearance & Odor: White to off-white powder with no odor, slightly fruity or

vanillin odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (method): N/A

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: 0.1 mg/m³ TWA

Short-Term Exposure Limit (STEL): Not Established

Routes of Exposure: Inhalation, Ingestion

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SECTION VI - HEALTH HAZARD DATA contd.

Health Hazards (acute and chronic): Through normal routes of entry, not expected to be a hazard. May cause irritation to eyes, skin and lungs. No adverse health effects expected from chronic exposure.

Carcinogenicity: Crystalline silica is listed by IARC as a Class 2A carcinogen based on limited evidence in humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a substance reasonably anticipated to be a carcinogen. NTP: Yes IARC: Yes OSHA: No

> Some products contain poligeenan. IARC lists poligeenan as a Class 2B meaning it is Apossibly carcinogenic to humans.≅

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. Eyes, skin and lungs may become irritated.

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; respirator, safety goggles and gloves. Sweep material

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up. 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: If exposure limits are exceeded use a dust respirator.

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. and subsidiaries shall not be held liable for any damage resulting

from the handling or contact with these products.

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document.

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