

Humco Holding Group, Inc.
7400 Alumax Drive
Texarkana, TX 75501
903-831-7808

Barium Sulfate

DATE ISSUED: 09/29/01

SECTION I

PRODUCT IDENTIFICATION

Product Name: Barium Sulfate

Chemical Formula: BaSO₄

Molecular Weight: 233.39

CAS No.: 7727-43-7

SECTION II

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.:	Percent	Hazardous
Barium Sulfate	7727-43-7	97 – 100%	Yes

SECTION III

HAZARDS IDENTIFICATION

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Degree of Hazard

4 - Extreme	Flammability	0
3 - High	Health	1
2 - Moderate	Reactivity	0
1 - Slight	Contact	0
0 – Insignificant		

Lab Protection Equipment: goggles, lab coat, vent hood & gloves.

Storage Color Code : Orange (general storage)

Potential Health Effects

Inhalation: Not expected to be a health hazard.

Ingestion: Not expected to be a health hazard.

Skin Contact: No adverse effects expected.

Eye Contact: No adverse effects expected but dust may cause mechanical irritation.

Barium Sulfate

Chronic Exposure: Long term inhalation of dust may lead to deposition in lungs in sufficient quantities to produce baritosis – a benign pneumoconiosis. This produces a radiological picture even though symptoms and abnormal signs may not be present.

Aggravation of Pre-existing Conditions: No information found.

SECTION IV FIRST AID MEASURES

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Contact: Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact: Wash thoroughly with running water. Get medical advice if irritation develops.

SECTION V FIRE FIGHTING MEASURES

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION VI ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

SECTION VII HANDLING & STORAGE

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Barium Sulfate

SECTION VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits: OSHA Permissible Exposure Limit (PEL): 15 mg/m³ total dust, 5 mg/m³ respirable dust

ACGIH Threshold Limit Value (TLV): 10 mg/m³ total dust containing no asbestos & < 1% crystalline silica

Ventilation System: In general, dilution ventilation is satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirator (NIOSH Approved): If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respiratory supplier, whichever is lowest. A full-face dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **Warning:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION IX PHYSICAL & CHEMICAL PROPERTIES

Appearance: Fine, white powder.

Odor: Odorless

Solubility: Insoluble in water.

Specific Gravity: 4.5 @ 15° (59°F)

pH: 5% in water is neutral to litmus

% Volatiles by volume @ 21°C (70°F): 0

Melting Point: 1580°C (2876°F)

Boiling Point: 1600°C (2912°F) Decomposes

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

Barium Sulfate

SECTION X STABILITY & REACTIVITY

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Burning may produce sulfur oxides.

Hazardous Polymerization: Will not occur.

Incompatibilities: Aluminum, phosphorus

Conditions to Avoid: Dusting and incompatibilities.

SECTION XI TOXICOLOGICAL INFORMATION

No LD50/LC50 information found relating to normal routes of occupational exposure.

Cancer Lists

Ingredient	NTP Carcinogen		IARC Category
	Known	Anticipated	
Barium Sulfate (7727-43-7)	No	No	None

SECTION XII ECOLOGICAL INFORMATION

Environmental Fate: This material may bioaccumulate to some extent.

Environmental Toxicity: No information found.

SECTION XIII DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulation may differ from federal disposal regulations.

Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XIV TRANSPORT INFORMATION

Not regulated.

Barium Sulfate

SECTION XV

OTHER INFORMATION

NFPA Ratings:

Degree of Hazard

4 - Extreme	Flammability	0
3 - High	Health	0
2 - Moderate	Reactivity	0
1 - Slight	Contact	0
0 - Insignificant		

Label Hazard Warning: As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions: None

Label First Aid: NA

Product Use: Laboratory Reagent

NF = Not Found

NA = Not Applicable