

16805 dls

Material Safety Data Sheet
 may be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor
 Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072



IDENTITY (As Manufactured) [REDACTED] *Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.*

Section I

Manufacturer's Name BARION	Emergency Telephone Number 614-282-9776
Address (Number, Street, City, State, and ZIP Code) [REDACTED]	Telephone Number for Information 614-282-9776
Date Prepared [REDACTED]	Signature of Preparer (optional) <i>Robert J. [Signature]</i>

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Strontium				99%
Barium Carbonate				1%

Section III — Physical/Chemical Characteristics

Boiling Point Loses CO ₂ @	1.35°C	Specific Gravity (H ₂ O = 1)	3.70
Vapor Pressure (mm Hg.)	Negligible	Melting Point Decomposes to SrO @	ca 1100°C
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water
Insoluble

Appearance and Odor
White to light tan odorless powder or granules

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits Non-Flammable	LEL N/A	UEL N/A
Extinguishing Media N/A Non-Flammable			
Special Fire Fighting Procedures None			

Unusual Fire and Explosion Hazards
 None

2090

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	Very high temperature (ca 1100°C) causes decomposition to Strontium Oxide and Carbon Dioxide.

Incompatibility (Materials to Avoid) Acids will decompose Strontium Carbonate to other Strontium salts with liberation of Carbon Dioxide. The reaction may be violent.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	None

HEALTH

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Slightly toxic Skin? No Ingestion? Slightly toxic

Health Hazards (Acute and Chronic) Acute: Excessive salivation, vomiting, abdominal pain, diarrhea, muscle twitchings, confusion, dilated pupils, possible convulsions and/or paralysis.

Chronic Overexposure: Possibly some degree of paralysis of the extremities.

Carcinogenicity: None NTP? IARC Monographs? OSHA Regulated?

Product is ca 1% Barium Carbonate. Oral-Human LDLo5700 mg/kg (100 times Barium Carbonate)

Signs and Symptoms of Exposure Slight irritation to eyes, skin and mucous membranes.

Medical Conditions Generally Aggravated by Exposure Not listed

Emergency and First Aid Procedures Flush with running water for 15 minutes, always seek medical attention.

Inhalation: Remove to fresh air.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled Waste containing more than 0.2% soluble Barium is hazardous. This material may contain up to 2% soluble Barium if the pH is low. It can be rendered non-hazardous by mixing with any Sulfate to form insoluble Barium Sulfate. Observe all federal, state and local laws.

Waste Disposal Method Try to keep material dry and away from acid. Sweep or scoop up spilled material. Remove to licensed landfill. Empty bags can be incinerated.

Precautions to Be Taken in Handling and Storing Recover wet or dry. Relatively non-toxic. No acids in storage area.

Other Precautions Reaction with acid can release large quantities of Carbon Dioxide which could lead to suffocation in a confined area. Use adequate ventilation.

Section VIII — Control Measures

Respiratory Protection (Specify Type) Use O.S.H.A. approved toxic dust respirator

Ventilation	Local Exhaust	Special
	Mechanical (General)	Other

Protective Gloves General purpose Eye Protection Chemical safety goggles

Other Protective Clothing or Equipment General full cover work clothes

Work/Hygiene Practices No smoking or eating in work areas. Wash hands well before eating or smoking.