

# Material Safety Data Sheet

## Barium carbonate

ACC# 02340

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Barium carbonate**Catalog Numbers:** AC192520000, AC192520050, AC192520250, AC217490000, AC217495000, AC423440000, AC423445000, B30-100, B30-3, B30-500**Synonyms:** None.**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
513-77-9	Barium carbonate	>99	208-167-3

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white to gray white powder.

**Warning!** Causes eye, skin, and respiratory tract irritation. Harmful if inhaled or swallowed. May cause lung damage. May cause kidney damage. May cause cardiac disturbances. May cause adverse reproductive effects based upon animal studies.

**Target Organs:** Heart, liver, gastrointestinal system, muscles.

#### Potential Health Effects

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** May cause liver damage. Human fatalities have been reported from acute poisoning. The barium ion is a muscle poison causing stimulation and then paralysis. Initial symptoms are gastrointestinal, including nausea, vomiting, colic, and diarrhea, followed by myocardial and general muscular stimulation with tingling in the extremities. The barium ion is a muscle poison causing stimulation and then paralysis. Initial symptoms are gastrointestinal, including nausea, vomiting, colic, and diarrhea, followed by myocardial and general muscular stimulation with tingling in the extremities. The

barium ion is a muscle poison causing stimulation and then paralysis. Initial symptoms are gastrointestinal, including nausea, vomiting, colic, and diarrhea, followed by myocardial and general muscular stimulation with tingling in the extremities.

**Inhalation:** Harmful if inhaled. May cause respiratory tract irritation. May cause lung damage.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Adverse reproductive effects have been reported in animals. Adverse reproductive effects have been reported in animals.

## Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Rinse area with large amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**Notes to Physician:** If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Barium carbonate	none listed	none listed	none listed

**OSHA Vacated PELs:** Barium carbonate: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear impervious gloves.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Powder

**Appearance:** white to gray white

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Negligible

**Vapor Density:** Not available.

**Evaporation Rate:** Negligible.

**Viscosity:** Not applicable.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 811 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Negligible in water.

**Specific Gravity/Density:** 4.29 (Water=1)

**Molecular Formula:** BaCO<sub>3</sub>

**Molecular Weight:** 197.35

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling

conditions.

**Conditions to Avoid:** Dust generation, excess heat.

**Incompatibilities with Other Materials:** 2-Furanpercarboxylic acid and bromine trifluoride.

**Hazardous Decomposition Products:** Carbon dioxide, barium oxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 513-77-9: CQ8600000; CQ8670000

**LD50/LC50:**

CAS# 513-77-9:

Oral, mouse: LD50 = 200 mg/kg;

Oral, mouse: LD50 = 200 mg/kg;

Oral, rat: LD50 = 418 mg/kg;

Oral, rat: LD50 = 418 mg/kg;

**Carcinogenicity:**

CAS# 513-77-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.

**Teratogenicity:** No information available.

**Reproductive Effects:** Maternal: oogenesis/ovaries/fallopian tubes, 1hl, rat TCLo=3130 ug/m<sup>3</sup>/24H (female 16W pre) Paternal: Spermatogenesis/testes/spre duct, 1hl, rat TCLo=1150 ug/m<sup>3</sup>/24H (male 16W)

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

**Environmental:** Marine animals concentrate the element 7-100 times, and marine plants 1000 times from seawater. ... Soybeans and tomatoes also accumulate soil barium 2-20 times. Adsorption of barium was measured in a sandy soil and a sandy loam soil at concn levels closely corresponding to those to be expected for field conditions. In general, sludge solutions appeared to incr the mobility of elements in a soil. This is due to a combination of complexation by dissolved organic cmpd, high background concn and high ionic strengths of the soil solution.

**Physical:** No information available.

**Other:** No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally,

waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	BARIUM COMPOUNDS, N.O.S.	BARIUM COMPOUNDS NOS (BARIUM CARBONATE)
<b>Hazard Class:</b>	6.1	6.1
<b>UN Number:</b>	UN1564	UN1564
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 513-77-9 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 513-77-9: immediate, delayed.

#### Section 313

This material contains Barium carbonate (listed as Barium compounds, n.o.s.), >99%, (CAS# 513-77-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 513-77-9 can be found on the following state right to know lists: New Jersey, (listed as Barium compounds, n.o.s.), Pennsylvania, (listed as Barium compounds, n.o.s.).

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations European Labeling in Accordance with EC Directives

#### Hazard Symbols:

XN

#### Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

#### Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

S 28 After contact with skin, wash immediately with...

### WGK (Water Danger/Protection)

CAS# 513-77-9: 0

### Canada - DSL/NDSL

CAS# 513-77-9 is listed on Canada's DSL List.

### Canada - WHMIS

This product has a WHMIS classification of D1B, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

### Canadian Ingredient Disclosure List

CAS# 513-77-9 is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 12/12/1997

**Revision #7 Date:** 2/11/2008

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*