

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 18.07.2021

Revision: 18.07.2021

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name:** *Barium carbonate (99.9%-Ba, Sr < .03%)*
- **Item number:** 56-1020
- **CAS Number:**  
513-77-9
- **EC number:**  
208-167-3
- **Index number:**  
056-003-00-2
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Strem Chemicals, Inc.  
7 Mulliken Way  
NEWBURYPORT, MA 01950  
USA  
info@strem.com*
- **Further information obtainable from:** *Technical Department*
- **1.4 Emergency telephone number:**  
*EMERGENCY: CHEMTREC: + 1 (800) 424-9300  
During normal opening times: +1 (978) 499-1600*

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

*Acute Tox. 4 H302 Harmful if swallowed.*

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
*The substance is classified and labelled according to the CLP regulation.*
- **Hazard pictograms**



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- **Signal word** *Warning*
- **Hazard-determining components of labelling:**  
*barium carbonate*
- **Hazard statements**  
*H302 Harmful if swallowed.*
- **Precautionary statements**
  - P101 If medical advice is needed, have product container or label at hand.*
  - P102 Keep out of reach of children.*
  - P103 Read label before use.*
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.*

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- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**  
513-77-9 barium carbonate
- **Identification number(s)**
- **EC number:** 208-167-3
- **Index number:** 056-003-00-2

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.

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- **6.3 Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**513-77-9 barium carbonate**

WEL	Long-term value: 0.5 mg/m <sup>3</sup> as Ba
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- **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:** Safety glasses· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**· **Form:** Powder· **Colour:** White· **Odour:** Odourless· **Odour threshold:** Not determined.· **pH-value:** Not applicable.· **Change in condition**· **Melting point/freezing point:** 811 °C· **Initial boiling point and boiling range:** 1.300 °C· **Flash point:** Not applicable.· **Flammability (solid, gas):** Not determined.· **Ignition temperature:**· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Not determined.· **Explosive properties:** Product does not present an explosion hazard.· **Explosion limits:**· **Lower:** Not determined.· **Upper:** Not determined.· **Vapour pressure:** Not applicable.· **Density at 20 °C:** 4.43 g/cm<sup>3</sup>· **Relative density** Not determined.· **Vapour density** Not applicable.· **Evaporation rate** Not applicable.· **Solubility in / Miscibility with water at 20 °C:** 0.02 g/l· **Partition coefficient: n-octanol/water:** Not determined.· **Viscosity:**· **Dynamic:** Not applicable.· **Kinematic:** Not applicable.· **Solvent content:**· **Organic solvents:** 0.0 %· **VOC (EC)** 0.00 %· **Solids content:** 100.0 %· **9.2 Other information** No further relevant information available.

## SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.· **10.2 Chemical stability**· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.· **10.3 Possibility of hazardous reactions** No dangerous reactions known.· **10.4 Conditions to avoid** No further relevant information available.

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- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

Oral	LD50	418 mg/kg (rat)
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**513-77-9 barium carbonate**

Oral	LD50	418 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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**SECTION 14: Transport information**

· <b>14.1 UN-Number</b> · <b>ADR, IMDG, IATA</b>	<b>UN1564</b>
· <b>14.2 UN proper shipping name</b> · <b>ADR</b> · <b>IMDG, IATA</b>	<b>1564 BARIUM COMPOUND, N.O.S.</b> <b>BARIUM COMPOUND, N.O.S.</b>
· <b>14.3 Transport hazard class(es)</b>  · <b>ADR</b>  	  <b>6</b>  <b>6.1</b>
· <b>IMDG, IATA</b>  	  <b>6.1 Toxic substances.</b> <b>6.1</b>
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	<b>III</b>
· <b>14.5 Environmental hazards:</b> · <b>Marine pollutant:</b>	<b>No</b>
· <b>14.6 Special precautions for user</b> · <b>Danger code (Kemler):</b> · <b>Stowage Category</b>	<b>Not applicable.</b> <b>60</b> <b>A</b>
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	<b>Not applicable.</b>
· <b>Transport/Additional information:</b>	
· <b>ADR</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	<b>5 kg</b> <b>Code: E1</b> <b>Maximum net quantity per inner packaging: 30 g</b> <b>Maximum net quantity per outer packaging: 1000 g</b>
· <b>Transport category</b> · <b>Tunnel restriction code</b>	<b>2</b> <b>E</b>
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	<b>5 kg</b> <b>Code: E1</b> <b>Maximum net quantity per inner packaging: 30 g</b> <b>Maximum net quantity per outer packaging: 1000 g</b>

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· **UN "Model Regulation":** UN 1564 BARIUM COMPOUND, N.O.S., 6.1, III

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I Substance is not listed.**
- **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

**SECTION 16: Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Department issuing SDS:** Technical Department.
- **Contact:** Technical Director
- **Abbreviations and acronyms:**  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 Acute Tox. 4: Acute toxicity – Category 4