

CHEMICAL PRODUCTS CORPORATION

SDS No. 172

SAFETY DATA SHEET

February 22, 2019

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1. PRODUCT IDENTIFIER

Strontium Carbonate

1.1 Trade Name: Strontium Carbonate, Grades B and D

Synonyms: Precipitated Strontium Carbonate; Carbonic Acid, Strontium salt

CAS Number: 1633-05-2 Molecular formula - SrCO₃

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended industrial uses:

- Manufacture of pyrotechnical products
- Use in welding electrode coating
- Glass industry
- Manufacture of glazes, frits and enamels
- Manufacture of ceramic materials and electro-ceramic materials
- Manufacture of other strontium compounds
- Use in zinc electrolysis

Industrial uses advised against: None.

1.3 Supplier of this SDS:

Chemical Products Corporation
102 Old Mill Road
P.O. Box 2470
Cartersville, Georgia 30120-1688
Telephone: 1-770-382-2144

1.4 EMERGENCY PHONE NUMBER: CHEMTREC, 800-424-9300 (24 hours every day)

2. HAZARD IDENTIFICATION

2.1 Classification in accordance with paragraph (d) of §1910.1200

Not a hazardous substance or mixture based on GHS criteria.

2.2 Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200.

Not a hazardous substance or mixture.

2.3 Other hazards not otherwise classified that have been identified during the classification process

- May cause slight eye and skin irritation.
- Product dust may be irritating to eyes, skin and respiratory system.

- Risk of pulmonary overload (respirable particulates).

3. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>COMPONENT</u> | <u>CAS #</u> | <u>EXPOSURE LIMITS</u> | <u>% BY WT</u> |
|---------------------|--------------|--|----------------|
| Strontium Carbonate | 1633-05-2 | Nuisance Dust – 15 mg/cu m | >= 97% |
| Barium Carbonate | 513-77-9 | OSHA PEL: 0.5 mg/cu m as Ba ACGIH TLV-TWA: Same | <= 2.5% |

4. FIRST AID MEASURES

4.1 Description of necessary first-aid measures

If swallowed

Rinse mouth with water. Consult a physician.

Give Epsom salts (magnesium sulfate) or Glauber's Salt (sodium sulfate) dissolved in water as a precaution to counteract any effect from the barium carbonate present in this product.

Never give anything by mouth to an unconscious person.

If inhaled

Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

For eye contact

Flush eyes with large amounts of water as a precaution and get medical attention of irritation persists.

For skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician if irritation persists.

4.2 Most important symptoms and effects, both acute and delayed

In case of ingestion, acute overexposure would be expected to cause severe abdominal pain related to the release of carbon dioxide gas as strontium carbonate reacts with stomach acid.

4.3 Indication of any immediate medical attention and special treatment needed, if necessary

- seek medical treatment if you feel unwell after being exposed to this product.

5. FIRE FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media.

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Flashpoint: Non-Flammable.

Flammability: Non-Flammable.

Autoignition: Non-Flammable.

5.2 Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).

Will decompose releasing carbon dioxide gas at extremely high temperatures. Contact with acid will release carbon dioxide gas. This product is toxic if ingested.

5.3 Special protective equipment and precautions for fire-fighters.

No special equipment is required, but personal protective equipment and self-contained breathing apparatus should be used as a general precaution. Wash away any of this product which may contact the body, clothing, or equipment. Limit water runoff if it is likely to contain this material.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures.

Use personal protective equipment. Avoid dust formation. Evacuate personnel to safe areas. Prevent further leakage or spillage. Ensure adequate ventilation. Avoid breathing dust.

6.2 Methods and materials for containment and cleaning up.

Do not let product enter drains. Sweep up and shovel to transfer released material to properly labeled containers. Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling.

Avoid formation of dust and aerosols. The potential for dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures

- Avoid contact with skin and eyes.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.
- Eye wash bottles or eye wash stations in compliance with applicable standards

7.2 Conditions for safe storage, including any incompatibilities.

Keep in a dry place. Contact with acids will release Carbon Dioxide gas.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV)

OSHA PEL: 0.5 mg/m³ as Ba equals 0.74 mg/m³ of this product.

ACGIH TLV-TWA is the same as the OSHA PEL.

NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) is 50 mg Ba/m³ equals 74 mg/m³ of this product.

8.2 Appropriate engineering controls.

Ensure adequate ventilation. Apply technical measures to comply with the occupational exposure limits.

8.3 Individual protection measures, such as personal protective equipment.

Respiratory Protection: Use a NIOSH-approved dust mask if excessive dust is present.

Skin Protection: Cover exposed skin areas and wear general-purpose gloves.

Eye Protection: Wear safety glasses. Use chemical goggles if excessive dust is present.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Solid; white or light gray powder or granules

Odor: No data available. Expected to be odorless.

Odor Threshold: No data available.

PH: 7.0 - 8.0 at 68 °F (20 °C) saturated aqueous solution

Melting point/Freezing point: No data available. Decomposes.

Initial boiling point and boiling range: No data available. Decomposes.

Flash point: No data available. Not flammable.

Evaporation rate: No data available.

Flammability (solid, gas): Not flammable.

Upper/lower flammability or explosive limits: No data available. Not flammable

Vapor pressure: No data available.

Vapor density: No data available.

Relative density – Specific Gravity: 3.79 g/cm³

Solubility: slightly soluble in water: 3.4 mg/l at 68 °F (20 °C)

Partition coefficient: n-octanol/water: No data available.

Auto-ignition temperature: No data available.

Decomposition temperatures: Thermal decomposition about 1233 °F (667 °C).

Viscosity: No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

Contact with acids liberates CO₂, sometimes violently

10.4 Conditions to avoid (e.g., static discharge, shock, or vibration)

No data available.

10.5 Incompatible materials

Acids. Strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions
- Carbon oxides, Strontium oxide

11. TOXICOLOGICAL INFORMATION

11.1 Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)

Most likely route of exposure is expected to be skin and eye contact.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute dermal toxicity: No data available.

Skin corrosion/irritation: No data available.

Respiratory or skin sensitisation: No data available.

Specific target organ toxicity - single exposure: No data available.

Specific target organ toxicity - repeated exposure: No data available.

Aspiration hazard: No data available

11.3 Delayed and immediate effects and also chronic effects from short- and long-term exposure

Sub-chronic: No data available.

Chronic: No data available.

Teratogenic: No data available.

Reproductive: No data available.

11.4 Numerical measures of toxicity (such as acute toxicity estimates)

No data available for Strontium Carbonate.

Acute oral toxicity for Strontium nitrate

- LD₅₀, rat, > 2,000 mg/kg

Acute inhalation toxicity for Strontium nitrate

- LC₅₀, 4 h, rat, 4.5 mg/l

11.5 Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity (aquatic and terrestrial, where available)

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available. No appreciable bioconcentration is expected in the environment.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

Waste containing more than 0.2% soluble barium is hazardous under the RCRA criteria. If disposed of in its purchased form, this product could be a characteristic hazardous waste exceeding the soluble barium regulatory limit in the RCRA TCLP test. Barium compounds are rendered insoluble and

non-hazardous by reaction with excess sulfate to form insoluble barium sulfate. Any disposal practice must be in compliance with local, state, and federal laws and regulations.

14. TRANSPORT INFORMATION

DOT HazMat proper shipping name.....: Not Regulated.
U.N./N.A. Number.....: None.
Technical Shipping Name.....: Strontium Compound.
D.O.T. Transport Hazard Class.....: None.
Packing group
Product R.Q. (lbs).....: None.
D.O.T. Label.....: None.
D.O.T. Placard: None.
Environmental hazards: Not a Marine Pollutant
Freight Class Bulk.....: Inorganic Chemical.
Freight Class Package.....: Inorganic Chemical.
Product Label.....: Strontium Carbonate

15. REGULATORY INFORMATION

TSCA Status.....: Listed on TSCA Inventory as ACTIVE
CERCLA Reportable Quantity..... : None.

SARA Title III:

Section 302, Extremely Hazardous Substances....: None.
Section 311/312, Hazard Categories.....: None.
Section 313, Toxics Release Inventory: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right-To-Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right-To-Know Components

Strontium carbonate CAS-No. 1633-05-2

New Jersey Right-To-Know Components

Strontium carbonate CAS-No. 1633-05-2

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

NFPA Rating (National Fire Protection Association):

Health - 1 (Materials that cause irritation upon exposure, but only minor injury is sustained even if no medical treatment is provided).

Fire - 0 (Materials which are nonflammable).

Reactivity - 0 (Materials which in themselves are normally stable even under fire exposure conditions, and which are not reactive with water).

Special - NA

Reason for Issue.....: 29 CFR 1910 compliance.

Prepared by.....: Jerry A. Cook.

Title.....: Technical Director.

Approval Date.....: February 22, 2019

Supersedes Date.....: May 15, 2015.

MSDS Number.....: 172

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