

STRONTIUM-87 CARBONATE (87Sr)

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/08/2011 Revision date: 05/06/2018 Supersedes: 08/08/2011 Version: 2.0 SRLM-6065

SECTION 1: Identification of the sub	stance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Substance	
Substance name	: STRONTIUM-87 CARBONATE (87Sr)	
EC No	: 216-643-7 (Unlabeled)	
CAS No	: 1633-05-2 (Unlabeled)	
Product code	: SRLM-6065	
Formula	: SrCO3	
	ance or mixture and uses advised against	
1.2.1. Relevant identified uses		
Main use category	: Professional use	
Industrial/Professional use spec	: For professional use only	
1.2.2. Uses advised against		
No additional information available		
1.3. Details of the supplier of the safety of	lata sheet	
Cambridge Isotope Laboratories, Inc.		
50 Frontage Road		
Andover, MA 01810 USA		
USA: 1-800-322-1174 Int: 1-978-749-8000		
cilsales@isotope.com www.isotope.com		
Emergency telephone number		
Emergency numbers:		
Chemtrec: 1-800-424-9300 (24 hours)		
International: 1-703-741-5970 (24 hours)		
SECTION 2: Hazards identification		
2.1. Classification of the substance or m	ixture	
Classification according to Regulation (EC) No.	p. 1272/2008 [CLP]	
Not classified		
Classification according to Directive 67/548/E	EC [DSD] of 1999/45/EC [DPD]	
Not classified		
GHS-US classification		
Not classified		
Adverse physicochemical, human health and	environmental effects	
No additional information available		
2.2. Label elements		
Labeling according to Regulation (EC) No. 127	72/2008 [CLP]	
No labeling applicable		
GHS-US labeling		

No labeling applicable

2.3. **Other hazards**

No additional information available

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SECTION 3: Composition/Information on ingredients			
3.1. Substances			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
STRONTIUM-87 CARBONATE (87Sr)	(CAS No) 1633-05-2 (Unlabeled) (EC No) 216-643-7 (Unlabeled) (EC Index No)	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
STRONTIUM-87 CARBONATE (87Sr)	(CAS No) 1633-05-2 (Unlabeled) (EC No) 216-643-7 (Unlabeled) (EC Index No)	100	Not classified

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
STRONTIUM-87 CARBONATE (87Sr) (Main constituent)	(CAS No) 1633-05-2 (Unlabeled)	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixtures	
Not applicable	
SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and effects	s, both acute and delayed
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate medical a	ttention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
5.2. Special hazards arising from the subs	stance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.
SECTION 6: Accidental release measu	ires
6.1. Personal precautions, protective equi	pment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Avoid breathing vapors, mist, gas. Avoid dust formation.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions	
Prevent entry to sewers and public waters. Do r	not allow to enter drains or water courses. Avoid release to the environment.
6.3. Methods and material for containm	ent and cleaning up
For containment	: Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	· Dravida adaquate vantilation to minimize dust and/or vanar concentrations
Precautions for safe handling Hygiene measures	 Provide adequate ventilation to minimize dust and/or vapor concentrations. Wash hands and other exposed areas with mild soap and water before eating, drinking or
	smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice.
7.2. Conditions for safe storage, includ	ing any incompatibilities
Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Store at room temperature away from light and moisture.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pers	sonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Appropriate engineering controls	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear eye protection. Chemical goggles or face shield with safety glasses.
Skin and body protection	: Wear suitable protective clothing, gloves and eye/face protection.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.
Environmental exposure controls	: Avoid release to the environment.
SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and	chemical properties
Physical state	: Solid
Appearance	: Powder with lumps
Molecular mass	: 147.63 g/mol (Labeled)
Color	: Light gray
Odor	: No data available.
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1) : No data available	
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto ignition tomporaturo	· No data available

Auto-ignition temperature

Decomposition temperature Flammability (solid, gas)

: No data available : No data available

: No data available

: No data available

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Relative vapor density at 20 °C	: No data available
Relative density	: 3.7 g/cm3 at 25 °C (77 °F)
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. **Other information**

No additional information available

SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Stable if stored under recommended conditions.	
10.3. Possibility of hazardous reactions	
No additional information available	
10.4. Conditions to avoid	
No additional information available	
10.5. Incompatible materials	
Strong oxidizing agents. Strong acids.	
10.6. Hazardous decomposition products	
Carbon oxides (CO, CO2). Strontium oxides.	
SECTION 11: Toxicological information	n
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

: May be harmful if swallowed.

12.2.	Persistence and degradability	
No add	ditional information available	

Symptoms/injuries after ingestion

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12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.
Product/Packaging disposal recommendations:	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / ADN	1
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information Other information	· No supplementary information available
	: No supplementary information available.
Special transport precautions	: Not dangerous.
Overland transport	
No additional information available	
-	
Transport by sea No additional information available	
Air transport No additional information available	
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: Not dangerous.
14.6. Transport in bulk according to Annex	II of MARPOL 73/78 and the IBC Code

Not applicable

S	SECTION 15: Regulatory information		
1	15.1. US Federal regulations		
	STRONTIUM-87 CARBONATE (87Sr) (1633-05-	2 (Unlabeled))	
	SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
	SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	

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15.2. International regulations

CANADA

STRONTIUM-87 CARBONATE (87Sr) (1633-05-2 (Unlabeled))
Listed on the Canadian DSL (Domestic Substances List)

15.2.1. **National regulations**

No additional information available

15.3. US State regulations

STRONTIUM-87 CARBONATE (87Sr)(1633-05-2 (Unlabeled))	
U.S California - Proposition 65 - Carcinogens List	No
U.S California - Proposition 65 - Developmental Toxicity	No
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information	: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.
NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
HMIS III Rating	
Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL Substance SDS

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