spectrum®



SAFETY DATA SHEET

Preparation Date: 8/18/2017

Revision date 04/18/2019

Revision Number: G2

1. IDENTIFICATION			
Product identifier			
Product code:	S2417		
Product Name:	STRONTIUM ACETATE		
Other means of identification			
Synonyms:	Strontium diacetate		
	Acetic acid, strontium salt		
	Strontium acetate hydrate		
CAS #:	543-94-2		
RTECS #	AJ4725000		
CI#:	Not available		
Recommended use of the cher	mical and restrictions on use		
Recommended use:	Toothpaste. Research and Development. Manufacture of substances.		
Uses advised against	No information available		
Supplier:	Spectrum Chemical Mfg. Corp		
	14422 South San Pedro St.		
	Gardena, CA 90248		
	(310) 516-8000		
Order Online At:	https://www.spectrumchemical.com		
Emergency telephone number	Chemtrec 1-800-424-9300		
Contact Person:	Tom Tyner (USA - West Coast)		
Contact Person:	Ibad Tirmiz (USA - East Coast)		

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not hazardous

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%		
Strontium Acetate	543-94-2	100		
	4. FIRST AID MEASURES			
First aid measures				
hav	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.			
	sh off immediately with soap and plenty of wa es. Get medical attention if irritation develop	ater removing all contaminated clothing and s. Consult a physician if necessary.		
	sh eyes with water for 15 minutes. Get medic sist, call a physician.	cal attention if irritation occurs. If symptoms		
	re to fresh air. If not breathing, give artificial i gen. Get medical attention.	respiration. If breathing is difficult, give		
	not induce vomiting without medical advice. I onscious person. Consult a physician if nece			
Most important symptoms and effects, t	oth acute and delayed			
Ma Ma Ma	Health injuries are not known or expected under normal use May affect the adrenal gland May affect the liver May affect the blood Ingestion of large amounts may cause vomiting, cholic, and diarrhea.			
-				
Protection of first-aiders First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.				
5. FIRE-FIGHTING MEASURES				
Extinguishing Media Use water spray or water mist, alcohol-resistant foam Suitable Extinguishing Media: Use water spray or water mist, alcohol-resistant foam chemical or Carbon dioxide (CO2).				
Unsuitable Extinguishing Media:	No information avai	No information available.		
Specific hazards arising from the chemical				
Hazardous combustion products	Carbon dioxide (CC	02).		
Specific hazardsMay be combustible at high temperatures. Fire produce irritating and/or toxic gases.				
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Special Protective Actions for Firefighters

Specific Methods:

No information available

Special Protective Equipment for Firefighters:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

 Personal Precautions:
 Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
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Γ	Strontium Acetate	543-94-2	None	None	None	None
_						

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Strontium Acetate	543-94-2	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Strontium Acetate	543-94-2	None	None

Appropriate engineering controls

Engineering measures to	o reduce exposure:
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Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles or Safety glasses with side-shields.
Skin and body protection:	Gloves Long sleeved clothing Chemical resistant apron
Respiratory protection:	Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Appearance:	Color:
Solid	Crystalline powder.	White.
Odor:	Taste	Formula
Slight acetic acid odor.	No information available.	C4H6O4Sr.1/2H2O
Molecular/Formula weight (g/mole)	: Flammability (solid, gas)	Flashpoint (°C/°F):
214.72	no data available	No information available
Flash Point Tested according to:	Autoignition Temperature (°C/°F):	Lower Explosion Limit (%):
Not available	No information available	No information available
Upper Explosion Limit (%):	Melting point/range(°C/°F):	Decomposition temperature(°C/°F):
No information available	150°C/302°F	No information available
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ACETATE

Boiling point/range(°C/°F): No information available

Specific gravity: 2.099

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Bulk density: No information available

pH No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: Soluble in Water Slightly soluble in alcohol **Density (g/cm3):** No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

Reactivity

10. STABILITY AND REACTIVITY

No information available

Chemical stability	
Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	: Hazardous polymerization does not occur
Conditions to avoid:	Heat. Ignition sources. Incompatible materials.
Incompatible Materials:	Strong oxidizing agents Strong acids
Hazardous decomposition products:	Carbon oxides. Strontium oxide.
<u>Other Information</u> Corrosivity:	No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Ingestion. Inhalation. Skin. Eyes.

Acute Toxicity

Component Information

Strontium Acetate CAS No

543-94-2

LD50/oral/rat = No information available LD50/oral/mouse = No information available LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No information available Other LD50 or LC50information = 239 mg/kg intravenous LDLo mouse 123 mg/kg intravenous LDLo rat			
Product Information			
LD50/oral/rat = Value - Acute Tox = No informat	tion available		
LD50/oral/mouse = Value - Acute Tox Oral = No inf	formation available		
LD50/dermal/rabbit Value - Acute Tox = No informat	tion available		
LD50/dermal/rat VALUE - Acute Tox Dermal = N	o information available		
LC50/inhalation/rat VALUE-Vapor = No information av VALUE-Gas = No information av VALUE-Dust/Mist = No informat	ailable		
LC50/Inhalation/mouse VALUE-Vapor = No information available VALUE - Gas = No information available VALUE - Dust/Mist = No information available			
<u>Symptoms</u>			
Skin Contact:	May cause skin irritation.		
Eye Contact:	May cause eye irritation.		
Inhalation	May cause irritation of respiratory tract.		
Ingestion	Health injuries are not known or expected under normal use. May cause digestive (gastrointestinal) tract irritation with nausea, vomiting, diarrhea.		
Aspiration hazard	No information available.		
Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Chronic Toxicity	hronic Toxicity Prolonged or repeated exposure in high doses may cause changes in blood clotting factors, adrenal function, and liver function.		
Sensitization: No information available.			
Mutagenic Effects:	No information available		
Carcinogenic effects:	Not considered carcinogenic.		

CGIH - NTP	OSHA HCS -	Australia -	Australia -
cinogens	Carcinogens	Notifiable	Prohibited

						Carcinogenic Substances	Carcinogenic Substances
Strontium Acetate	543-94-2	Not listed	Not listed				

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No data is available
Reproductive Effects: Developmental Effects: Teratogenic Effects:	No information available No information available No information available
Specific Target Organ Toxicity	

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility in soil Other adverse effects	No information available No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Strontium Acetate	543-94-2	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Proper Shipping Name: Not Regulated No information available

Product code: S2417

Product name: STRONTIUM ACETATE

Hazard Class No information available Subsidiary Class No information available No information available Packing group: Emergency Response Guide No information available Number Marine Pollutant No data available DOT RQ (lbs): No information available **Special Provisions** No Information available Symbol(s): No information available **Description:** No information available TDG (Canada) UN-No: Not Regulated Proper Shipping Name: No information available **Hazard Class** No information available Subsidiary Risk: No information available Packing Group: No information available Marine Pollutant No Information available No information available **Description:** ADR **UN Number** Not regulated No information available **Proper Shipping Name:** Transport hazard class(es) No information available No information available Packing group Subsidiary Risk: No information available IMDG UN-No: Not Regulated **Proper Shipping Name:** No information available Hazard Class: No information available Subsidiary Risk: No information available Packing Group: No information available Marine Pollutant No information available RID **UN Number** Not Regulated **Proper Shipping Name:** No information available No information available Transport hazard class(es) Subsidiary Risk: No information available **Packing group** No information available ICAO (air) UN-No: Not Regulated **Proper Shipping Name:** No information available **Hazard Class** No information available Subsidiary Risk: No information available Packing Group: No information available ΙΑΤΑ **UN Number** Not Regulated Proper Shipping Name: No information available Transport hazard class(es) No information available Subsidiary Risk: No information available Packing group No information available Precautionary Statements -No information available Response **Special Provisions** No information available

Product code: S2417

Product name: STRONTIUM ACETATE

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Strontium Acetate	543-94-2	PresentACTIV E	Not present	Present	Present (2)-693	Present	Present	Present 208-854-8

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
Strontium Acetate	543-94-2	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Strontium Acetate	543-94-2	None	None	None	None	None

U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	
Strontium Acetate	543-94-2	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Not a dangerous product according to HPR classification criteria. Information:

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)	
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ACETATE

Strontium Acetate	543-94-2	Not Listed	Present
Component		CAS No	CEPA Schedule I - Toxic Substances
Strontium Acetate		543-94-2	Not listed
Component		CAS No	CEPA - 2010 Greenhouse Gases Subject
			to Mandatory Reporting

Not listed

543-94-2

EU Classification

Strontium Acetate

EU GHS - SV - CLP 1272/2008

	CAS No	EU GHS - SV - CLP (1272/2008)
Strontium Acetate	543-94-2	

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Component	CAS No	Classification	Concentration	Safety Phrases
			Limits:	
Strontium Acetate	543-94-2		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: None

16. OTHER INFORMATION

Preparation Date:	8/18/2017
Revision date	04/18/2019
Prepared by:	Roumann Pangilinan

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable. Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet