

Calcium Thiosulfate Solution

SDS Number: CTS 2908

Date: June 1, 2015

Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product Name: Sold under the trade name of: No-Chlor™ Calcium Thiosulfate Solution Captor

Other Identification:

Chemical Family: Inorganic salt solution

Formula: CaS₂O₃

Reach Pre-Registration #: 05-2115925358-40-0000

Reseller: Measurement Technologies, Inc.
P.O. Box 2195
Redmond, WA 98074
Information: (425) 836-8683

Manufacturer: Tessengerlo Kerley, Inc.
2255 N. 44th Street, ste.300
Phoenix, AZ 85008
Information: 602-889-8300

Emergency Contact: 800-424-9300 (CHEMTREC)

Section 2: HAZARD(S) IDENTIFICATION

Hazard Classification: Health None
Physical None

Signal Word: Not Applicable
Hazard Statement(s): Not Applicable
Symbol(s): Not Applicable

Precautionary Statement(s): Avoid contact with eyes. Use/store in cool, well ventilated areas. Avoid prolonged/repeated breathing of vapors. Avoid prolonged/repeated contact with the skin. Keep away from any sources of heat or flames. Store totes or small containers out of direct sunlight. Wear protective apron, gloves and eye and face protection.

Unclassified Hazard(s): None
Unknown Toxicity Ingredient: None

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients

Chemical	Synonym Common Name	Cas No.	EINECS No.	% by Wt.
Thiosulfuric acid (H ₂ S ₂ O ₃) calcium salt	Calcium Thiosulfate	10124-41-1	233-333-7	20-30%
Water	Water	7732-18-5	231-791-2	70-80%

Section 4: FIRST AID MEASURES

Symptoms / Effects:

Acute: Eye contact may cause eye irritation. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.
Chronic: No known chronic effects.

Eyes: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

Skin: Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain medical attention if irritation occurs.

Ingestion: If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

Inhalation: Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start CPR.

Section 5: FIRE FIGHTING MEASURES

Flammable Properties: (See Section 9, for additional flammable properties)

Heating this product to dryness will cause the release of oxidesw of sulfur.

NFPA: Health - 1 Flammability - 0 Reactivity - 0

Extinguishing Media:

Suitable Extinguishing Media: Not flammable, use media suitable for combustibles involved in fire.

Unsuitable Extinguishing Media: None known

Protection of Firefighters:

Specific Hazzards Arising from the Chemical:

Physical Hazzards: Heating (flames) of closed or sealed containers may cause violent rupture of containers due to thermal expansion of compressed gases.

Chemical Hazzards: Heating causes release of oxides of sulfur. Sulfur dioxide is highly irritating to the eyes, respiratory tract and moist skin.

Protective Equipment and Precautions for Firefighters:

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment specified in Section 8. Isolate the hazzard area and deny entry to unnecessary, untrained and unprotected personnel.

Environmental Precautions: Large quantities should be kept out of "waters of the United States" because of potential aquatic toxicity (See Section 12).

Methods of Containment:

Small Releases: Confine and absorb small releases on sand earth or other inert absorbent.

Large Releases: Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity).

Methods for Cleanup:

Small Releases: For small areas shovel up to the absorbed materila and place in drums for disposal as a chemical waste.

Large Releases: Recover as much of the spilled product as possible using portable pump and hoses. Treat remaining material as a small release (above).

Section 7: HANDLING and STORAGE

HANDLING: Avoid contact with eyes. Use only in well ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with skin.

STORAGE: Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store tote and smaller containers out of direct sunlight at moderate temperatures. (See Section 10 for materials of construction).

Section 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Guidelines:

Chemical	OSHA PEL's		ACGIH TLV's	
	TWA	STEL	TWA	STEL
Not Applicable				

Engineering Controls: None

Personal Protective Equipment (PPE):

Eye/Face Protection: Chemical goggles and a full face shield.

Skin Protection:	Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.
Respiratory Protection:	None generally required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.
Hygiene Considerations:	There are no known hazards associated with this product when used as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

Appearance:	Colorless liquid
Odor:	Fresh concrete to no odor at all
Odor Threshold:	Not determined
Boiling point:	212° F (100 C) W/ decomposition
Vapor pressure:	37 mm Hg @ 100° F
Vapor density:	same as water
Relative Density:	1.25 - 1.26 (10.4 - 10.5 Lbs/gal) (Typical)
Solubility:	Complete
Flash Point:	Not Applicable
Evaporation Rate:	Not Applicable
Flammability:	Not Applicable
Upper/Lower Flammability Limits:	Not Applicable
Partition Coefficient:	Data not available
Ph:	6.5 - 8.0
Melting Point/Freezing Point:	Salt out temperature is 32° F (Typical)
Auto-Ignition Temperature:	Not Applicable
Decomposition Temperature:	Data not available
Viscosity:	2.11 cSt @ 25° C

Section 10: STABILITY and REACTIVITY

Reactivity:	Avoid interaction with heat, flames, oxidizers or acids
Chemical Reactivity:	This is a stable product under normal temperatures, 60-120° F (15-49° C)
Possibility of Hazardous Reactions:	See section below
Conditions to Avoid:	Heating above 120° F (49° C)
Incompatible Materials:	Strong oxidizers such as nitrites, nitrites or chlorates can cause explosive mixtures if heated to dryness. Acids will cause the release of sulfur dioxide, a severe respiratory hazard. The following materials of construction are not compatible with CTS: carbon steel, copper or its alloys (brass, bronze) or galvanized steel.
Hazardous Decomposition Products:	Calcium oxide and oxides of sulfur. Sulfur dioxide is a severe respiratory irritant.

Section 11: TOXICOLOGICAL INFORMATION

Oral:	Oral Rat (female) LD ₅₀ : > 2,000 mg/Kg (OECD 425) Interperitoneal-Rat LD _{LO} 573 mg/kg Intravenous-Rat LD _{LO} 344 mg/kg Intraperitoneal-Mouse LD ₅₀ 115 mg/kg
Deremal:	Data not available
Inhalation:	Data not available
Eye:	Data not available
Chronic/Carcinogenicity:	Not listed in NTP, IARC or by OSHA
Teratology:	Data not available
Reproduction:	Data not available
Mutagenicity:	Data not available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Data not available
Persistence & Degradability:	Data not available
Bioaccumulative Potential:	Data not available
Mobility in Soil:	Data not available

Other Adverse Effects:

Data not available

Section 13: DISPOSAL CONSIDERATIONS

Calcium Thiosulfate is not considered a hazardous waste under Federal Hazardous Waste Regulations, 40 CFR 261. Consult state and local regulations for different or more restrictive disposal regulations.

Section 14: TRANSPORT INFORMATION**Basic Shipping Description:**

Proper Shipping Name: Calcium Thiosulfate Solution (Not regulated by DOT)
Hazard Class: Not Applicable
Identification Number: Not Applicable
Packing Group: Not Applicable
Hazardous Substance: No
Marine Pollutant: No

Additional Information:

Other DOT Requirements:
Reportable Quantity: Not Applicable
Placard(s): Not Applicable
Label(s): Not Applicable
USCG Classification: Class 43, Misc. water solutions. Chris Code: unknown
International Transportation:
IMO: Non-hazardous under IMO regulations
IATA: Non-hazardous under IMO regulations
TDG (Canada): Non-hazardous under IMO regulations
Emergency Response Guide: Not Applicable
ERAP (Canada): Not Applicable
Special Precautions: None

Section 15: REGULATORY INFORMATION**U.S. Federal Regulations:**

OSHA: This product meets the criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.
TSCA: Product is contained in USEPA Toxic Substance Control Act Inventory
CERCLA: Reportable Quantity - Not Applicable
SARA TITLE III:

Extremely Hazardous Substance (EHS):		No
Section 312, (Tier II) Ratings:	Immediate (acute)	Yes
	Fire	No
	Sudden release	No
	Reactivity	No
	Delayed (chronic)	No
Section 313 (Form R):	Not Applicable	
	Not Applicable	
	Not Applicable	

RCRA:
CAA (Hazardous Air Pollutant/HAP)

International Regulations:

Canada:
WHMIS: Not Hazardous
DSL/NDSL: Listed in DSL

State Regulations:

CA Proposition 65: No

Section 16: OTHER INFORMATION

REVISIONS: July 8, 2015

The entire SDS was reformatted to comply with the new Hazard Communications Standard dated March 26, 2012.

It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. We reserve the right to revise Safety Data Sheets periodically as new information becomes available.