

SAFETY DATA SHEET

DATE PREPARED: 9/7/2018

CURRENT AS OF: 9/

9/7/2018

SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT NAME: ULTRA GRO 0-0-0-5.5(Ca)-9.5(S) Thio Plex

PRODUCT USE: FERTILIZER

MFR INFO: Ultra Gro, LLC 1043 S. Granada Drive Madera, CA 93637

FOR EMERGENCY:	(559) 661-0977
CHEMTREC:	(800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOLS / STATEMENTS:

2.1	Health None		
2.2	Physical None		
2.3	Not applicable		
2.4	Not applicable		
2.5	Not applicable		
2.6	None		
2.7	None		

SECTION3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Ingredients: (See Section 8 for exposure guidelines)

<u>CHEMICAL</u>			SYNONYM		CAS NUMB	ER	EINECS No.	% by Wt.
Thiosulfuric acid (H	I2S2O3) calc	ium salt	Calcium thi	osulfate	10124-41-1	L	233-333-7	20-30
Water			Water		7732-18-5		231-791-2	Remaining %

SECTION 4: FIRST AID MEASURES				
4.1	Symptoms/Effects:			
	Acute: Eye contact may cause eye irritation. Repeated or prolonged skin contact my cause skin			
	irritation. Ingestion may irritate the gastrointestinal tract.			
	Chronic: No known chronic effects.			
4.2	Eyes: Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.			
4.3	Skin: Immediately flush with large quantities of water. Remove contaminated clothing under a safeth shower. Continue rinsing. Obtain medical attention if irritation occurs.			
4.4	Ingestion: If victim is conscious, giv 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention ifirritation occurs.			
4.5	Inhalation: Remove victim from contaminated atmosphere. If breathing is labored, administer Oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.			

SECTION 5: FIREFIGHTING MEASURES					
5.1	Flammable	nable Properties: (See sect. 9, for additional flammable prperties)			
	NFPA:	Health-1	Flammability-0	Reactivity-0	
5.2	5.2 Extinguishing Media:				
	5.2.1	Suitable Ex	(tinguishing Media: No	t flammable, use media suitable for	
		combustib	les involved in fire.		
	5.2.2	Unsuitable Extinguishing Media: None known			
5.3 Protection of Firefighters:					
	5.3.1	.3.1 Specific Hazards Arising from the Chemical:			
		Physical H	Physical Hazards: Heating (flames) of closed or sealed containers may cause		
		violent rupture of container due to thermal expansion of compressed gases.			
		Chemical Hazards: Heating causes release of oxides of sulfur. Sulfur dioxide is			
		highly irritating to the eyes, respiratory tract and moist skin.			
	5.3.2	Protective self-contai	Equipment and Precau ned breathing apparatu	utions for Firefighters: Firefighters should wear us (SCBA) and full fire-fighting turnout gear.	
		Reep conta	amers/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 6.1 hazard area and deny entry to unnecessarym untrained and unprotected personnel. 6.2 Environmental Precautions: Keep out of "waters of the United States" because of potential aquatic toxicity. This product is a non-hazardous liquid fertilizer solution designed to supply Calcium and Sulfur to crops. 6.3 **Methods of Containment:** Small Release: Confine and absorb small releases with sand, earth or other inert absorbents. Large Release: Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoiff in surface waterways (potential aquatic toxicity), storm drains and sewers. 6.4 Methods of Cleanup: Small Release: Shovel up the absorbed material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended. Large Release: Recover as muc of spilled product as possible using portable pump and hoses. Use

material as originally intended or dispose of as a chemical waste. Treat remaining product as small release (above).

SECTION 7: HANDLING AND STORAGE

- 7.1Handling: Avoid contact with eyes. Use onlyin a well-ventilated area. Wash thoroughly
after handling. Avoid prolonged or repeated contact with the skin.
- 7.2 Storage: Store in well-ventilated area. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See section 10.5 for materials of construction.)

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1

Exposure Guidelines:

Chemical	OSHA PELs		ACGIH TLVs	
	TWA	STEL/C	TWA	STEL
Thiosulfuric acid (H2S2O3) calcium salt	None	None	None	None
Water	None	None	None	None

8.2 Engineering Controls: Keep eye wash/safety showers in the areas where product is commonly used.

8.3 PERSONAL PROTECTIVE EQUIPMENT(PPE)

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

8.3.2 Skin Protection: Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to resuse.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION cont.

8.3.3 Respiratory Protection: None required. If conditions exist where mist may be generated, a NIOSH/MSHA approved mist respirator should be worn.
8.3.4 Hygiene Considerations: There are no known hazards associasted 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

9.1	Appearance:	Colorless liquid
9.2	Odor:	Fresh concrete to no odor
9.3	Odor Threshold:	Not determined
9.4	pH:	6.5-8.0 (typical)
9.5	Melting/Freezing Point:	Salt-out temperature 32F(oC) (typical)
9.6	Boiling Point:	212 F (100C) with decomposition
9.7	Flash Point:	Not applicable
9.8	Evaporation Rate:	Not determined
9.9	Flammability:	Not applicable
9.10	Upper/Lower Flammability Limit:	Not applicable
9.11	Vapor Pressure:	37mm Hg @ 100 F
9.12	Vapor Density:	Same as water
9.13	Relative Density:	1.25-1.26 (10.5 lbs/gal) Typical
9.14	Solubility:	Complete
9.15	Partition Coefficient:	Data not available
9.16	Auto-Ignition Temperature:	Not applicable
9.17	Decomposition Temperature:	Data not available
9.18	Viscosity:	2.11 cSt @25 C

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity: Avoid interaction with heat, flames, oxidizers or acids.
10.2	Chemical Reactivity: This is a stabale product under normal (ambient) temperature and
	pressure.
10.3	Possibility of Hazardous Reactions: Strong oxidizers such as nitrates, nitritesor chlorates
	can cause explosive mixtures if heated to dryness.
10.4	Conditions to Avoid: High heat or fire conditions.
10.5	Incompatible Materials: Strong oxidizers (See Section 10.3). Acids will cause the release of
	Sulfur dioxide, a severe repiratory hazard. Thio plex is not compatible with; carbon steel
	copper or zinc or any of their alloys including brass, bronze or galvanized materials. These
	materials should not be utilized in handling systems or storage containers for this product.

SECTION 10: STABILITY AND REACTIVITY cont.

10.6

Hazardous Decomposition Products: Calcium oxide and Oxides of Sulfur. Sulfur dioxide is a severe respiratory irritiant.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Oral: 11.1.1: 11.1.2: 11.1.3:	Oral Rat (female) LD50:>2,000 mg/Kg (OECD 425) Interperitoneal Rat LD Io: 573 mg/Kg (calcium thiosulfate) Intravenous Rat LD Io:344 mg/Kg (calcium thiosulfate) Intraperitonel Mouse LD 50: 115 mg/Kg (calcium thiosulfate)
11.2	Dermal:	No data available
11.3	Inhalation:	No data available
11.4	Eye:	No data available
11.5	Chronic/Carcinogenicity:	Not listed in NTP, LARC or OSHA
11.6	Teratology:	No data available
11.7	Reproduction:	No data available
11.8	Mutagenicity:	No data available

SECTION 12: ECOLOGICAL INFORMATION

This product is not known to be ecotoxic, persistent, or have the potential to bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all national, regional / state, and local regulations. Reuse recovered product where possible.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated as a transportation hazard.

SECTION 15: REGULATORY INFORMATION

SARA SECTION 311 / 312 HAZARD CATEGORY:

IMMEDIATE HAZARD

SECTION 16: OTHER INFORMATION

Revisions: This SDS was reformatted to comply with the new Hazard Communication Standard dated September 7, 2018.

PREPARED BY: Ultra Gro, LLC

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