ULTRA GRO LLC
Safety Data Sheet
Soil Treatment™

SECTION 1: Identification

1.1 GHS Product identifier

Product name: Soil Treatment™

1.2 Other means of identification

UG Calcium Soil Treatment 6-0-0-8Ca

1.3 Recommended use of the chemical and restrictions on use

Commercial Agriculture / Horticultural Use Fertilizer.

1.4 Supplier's details

Name	Ultra Gro LLC
Address	1043 S Granada Ave Madera CA 93637 USA
Telephone	(559) 661-0977
Email	office@ultragro.com

1.5 Emergency phone number

1-800-424-9300 - CHEMTREC - U.S. Canada, Puerto Rico - 24 Hrs

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200, 2012)

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Calcium nitrate tetrahydrate

Concentration	7 - 13 % (weight)
EC no.	233-332-1
CAS no.	10124-37-5

2. Thiosulfuric acid (H2S2O3), calcium salt (1:1)

Concentration	65 - 85 % (weight)
EC no.	233-333-7
CAS no.	10124-41-1

3. UG Proprietary Blend of Non-Hazardous Ingredients

Concentration	10 - 30 % (weight)

Trade secret statement (OSHA 1910.1200(i))

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.
Designates that a specific chemical identity and/or composition percentage has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled, avoid inhaling vapor, spray, or mist. If inhaled, remove it to fresh air and get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

In the case of skin contact:	There are no known significant effects or critical hazards. Wash with soap and water. Get medical attention if irritation develops.
In case of eye contact:	Causes severe eye damage. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Check for and remove any contact lenses. Get medical attention immediately.
If swallowed:	Harmful if swallowed. It may cause burns to the mouth, throat, and stomach. Wash out mouth with water. If the material has been swallowed and the exposed person is conscious, drink small quantities of water. Get medical attention if you feel unwell.
Personal protective equipment for first-aid responders	If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained.

4.2 Most important symptoms/effects, acute and delayed
Notes to physician: Treat symptomatically. Contact a poison treatment specialist immediately if large quantities have been ingested or inhaled. Symptoms may be delayed in the inhalation of decomposition products during a fire. The exposed person may need to be kept under medical surveillance for 48 hours.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
Eye contact: Adverse symptoms may include the following: pain, watering, redness
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: Adverse symptoms may include stomach pain and burns to the mouth, throat, and stomach.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use an extinguishing agent suitable for the surrounding fire.

5.2 Specific hazards arising from the chemical

When heated to decomposition (as in fires), it emits toxic fumes of ammonia, hydrogen sulfide, nitrogen oxides, and sulfur oxides.

5.3 Special protective actions for fire-fighters
Firefighters should wear appropriate protective equipment and a self-contained breathing apparatus (SCBA) with a full facepiece in positive pressure mode.

If there is a fire, promptly isolate the scene by removing all persons from the vicinity of the incident. No action shall be taken involving any personal risk or without suitable training.

Further information
Non-flammable. Non-explosive.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures
Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not breathe vapor or mist. Provide adequate ventilation. Wear an appropriate respirator when ventilation is inadequate. Put on proper personal protective equipment (see Section 8)

6.2 Environmental precautions
Avoid dispersal of spilled material, runoff, and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

6.3 Methods and materials for containment and cleaning up
SMALL SPILLS: Contain and absorb the spill with absorbent material and place it in containers for later disposal. Wash the site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of the spill to prevent further movement. Recover by pumping or using suitable absorbent material and place it in containers for later disposal. Dispose of the spill in an appropriate waste container.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Put on appropriate personal protective equipment (see Section 8). Do not get in the eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If the material presents a respiratory hazard during normal use, use only with adequate ventilation or wear an appropriate respirator. Please keep it in the original container or an approved alternative made from a compatible material, and keep it tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse the container. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash their hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store by local regulations. Store in the original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep the container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination—Berm storage facilities to prevent soil and water pollution in the event of spillage.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Calcium nitrate tetrahydrate (CAS: 13477-34-4)

8.2 Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dust. Recommended: Tightly-fitting goggles,

Skin protection

Personal protective equipment for the body should be selected based on the task and risks involved. Appropriate footwear and additional skin protection measures should be chosen based on the task and the risks involved and approved by a specialist before handling this product.

Body protection

If a risk assessment indicates this is necessary, chemical-resistant, impervious gloves complying with an approved standard should always be worn when handling chemical products. We recommend gloves typically greater than 0.35 mm thick for general applications. It should be emphasized that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the glove's permeation efficiency will depend on the exact composition of the glove material. Personal protective equipment for the body should be selected based on the task and risks involved. Appropriate footwear and additional skin protection measures should be chosen based on the task and the risks involved and approved by a specialist before handling this product.

Respiratory protection

In case of inadequate ventilation, wear respiratory protection. Recommended Filter P2

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Slight ammonia odor
The odor threshold	is Not Determined
Melting point/freezing point	Salt out temperature 32 F
Boiling point or initial boiling point and boiling range	212 F with decomposition
Flammability	Not applicable
Lower and upper explosion limit/flammability limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Date not available
pH	4.5 – 5.5
Kinematic viscosity	Not determined
Solubility	Soluble
Partition coefficient n-octanol/water (log value)	Date not available
Vapor pressure	37mm Hg @ 100 F
Evaporation rate	Not determined
Density and/or relative density	1.38
Relative vapor density	Same as water

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability
The product is stable.

10.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
Heat, flames. oxidizers or acids

10.5 Incompatible materials
Alkalis, combustible materials, reducing materials, organic materials, Acids
---
Ammonium thiosulfate: Seriously corrodes copper-based alloy.

10.6 Hazardous decomposition products

Ammonium thiosulfate: Emits toxic fumes of ammonia, hydrogen sulfide, nitrogen oxides, and sulfur oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Acute effects: N.A.
Chronic effects: N.A.
Target organs: N.A.
ORL-RAT LD50: N.A.
IHL-RAT LC50: N.A.
SKN-RBT LD50: N.A.

Skin corrosion/irritation
It may cause skin irritation.

Severe eye damage/irritation
Causes severe eye irritation.

Respiratory or skin sensitization
Based on available data, it is not expected to cause respiratory or skin sensitization.

Germ cell mutagenicity
Data not available

Carcinogenicity
No evidence available

Reproductive toxicity
Data not available

Specific target organ toxicity (STOT) - single exposure
No data available

Specific target organ toxicity (STOT) - repeated exposure
No data available

Aspiration hazard
It may be harmful if swallowed and enters the airways.

SECTION 12: Ecological information

Toxicity
Static acute 96-hour-LC50 for bluegills is 1,000 mg/L.
Static acute 96 hour-LC50 for rainbow trout is 770 mg/L.
Static acute 96-hour-LC50 for sheepshead minnow is > 1,000 mg/L.
Static acute 96-hour-LC50 for mysid shrimp is 77 mg/L.

Ammonium thiosulfate: Not available.

Persistence and degradability

Ammonium thiosulfate: Hazardous short-term degradation products are not likely to form. However, long-term degradation products may arise. The material itself and its degradation products are not toxic.

Bioaccumulative potential
The product nor its decomposition products are not expected to bioaccumulate

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Waste generation should be avoided or minimized wherever possible. Disposal of this product, solutions, and by-products should always comply with environmental protection and waste disposal legislation and regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Packaging disposal
Waste packaging should be recycled.

Waste treatment
Do not allow this product to enter storm drains or waterways.

Sewage disposal
Waste should not be disposed of untreated in the sewer unless it is fully compliant with the requirements of all authorities with jurisdiction.

Other disposal recommendations
If this product as supplied becomes a waste, it does not meet the hazardous waste criteria defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Consult state and local regulations for different or more restrictive disposal regulations.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health, and environmental regulations specific to the product in question

New Jersey Right To Know Components
Common name: CALCIUM NITRATE
CAS number: 10124-37-5

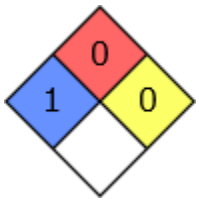
US EPA TSCA public inventory
Chemical name: Thiosulfuric acid (H2S2O3), calcium salt (1:1)
CAS number: 10124-41-1

15.2 Chemical Safety Assessment
CERLA: Reportable Quantity – Not applicable
SARA Title III:
Extremely Hazardous Substance (EHS): Not Listed
Section 312 (Tier II) ratings: Immediate (acute) Yes, Fire No, Sudden release No, Reactivity No, Delayed (chronic) No
Section 313 (FORM R): Ammonia (CAS # 7664-41-7) – 14.6%
RCRA (Resource Conservation and Recovery Act) Status: Not Applicable
CAA Hazardous Air Pollutant (HAP): Not Applicable

HMIS Rating

Soil Treatment	
HEALTH	* 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	A

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

The information and data contained herein are based upon facts considered correct as of the date. Information is supplied upon the condition that the persons receiving it will determine its suitability for their purposes prior to use. In no event will Ultra Gro, LLC be responsible for damages resulting from the use or reliance upon this information. No representations or warranties, expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature are made hereunder concerning information or the product to which this information refers.