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1. Product and Company Identification

Product Code: 904148

TCS GrowStar 00-00-25 LIQUID FOLIAR POTASSIUM - 275GAL TOTE **Product Name:**

Trade Name: Liquid Fertilizer

Turf Care Supply Corp. **Phone Number:** Company Name:

50 Pearl Road 1 (330)558-0910

Suite 200

Brunswick, OH 44212

Web site address: www.turfcaresupply.com regaffairs@tcscusa.com **Email address:**

PERS Emergency Contact: 1 (800)633-8253 Turf Care Supply Corp. 1 (330)558-0910 Information:

Liquid Fertilizer. Synonyms:

2. Hazards Identification

Acute Toxicity: Oral, Category 4 Acute Toxicity: Skin, Category 5



GHS Signal Word: Warning

GHS Hazard Phrases: Harmful if swallowed.

May be harmful in contact with skin.

GHS Precautionary Phrases: Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. **GHS Response Phrases:**

Rinse mouth.

IF exposed or concerned: Get medical attention/advice.

GHS Storage and Disposal

Phrases:

Store in a diked or contained area to prevent uncontrolled release to the environment.

Potential Health Effects Chronic: Prolonged or repeated skin contact may cause dermatitis. Prolonged or (Acute and Chronic):

repeated exposure may cause permanent eye damage. Chronic exposure may cause

lung damage. Adverse reproductive effects have been reported in animals.

May be harmful if inhaled. Low hazard for normal industrial handling. The toxicological Inhalation:

> properties of this substance have not been fully investigated. May cause systemic effects. Material may be irritating to mucous membranes and upper respiratory tract.

Skin Contact: May cause skin irritation. Low hazard for usual industrial handling.

Eye Contact: May cause eye irritation.

Ingestion: May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting

and diarrhea. Low hazard for normal industrial handling. The toxicological properties of

this substance have not been fully investigated. May cause systemic effects.



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3. Composition/Information on Ingredients

CAS# **Hazardous Components (Chemical Name)** Concentration

10294-66-3 0 - 50.0 % Potassium thiosulphate

4. First Aid Measures

Emergency and First Aid

Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial

respiration. If breathing is difficult, give oxygen. Get medical aid.

In Case of Skin Contact: In case of contact, flush skin with plenty of water. Remove contaminated clothing and

shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Wash off with soap and plenty of water.

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and In Case of Eye Contact:

lower eyelids. Get medical aid. Do NOT allow victim to rub eyes or keep eyes closed.

In Case of Ingestion: Get medical aid. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Call a

poison control center. If swallowed, do not induce vomiting unless directed to do so by

medical personnel. Never give anything by mouth to an unconscious person.

Signs and Symptoms Of

Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have

not been thoroughly investigated.

Treat symptomatically and supportively. Note to Physician:

5. Fire Fighting Measures

Flash Pt: No data.

LEL: No data. UEL: No data. **Explosive Limits:**

No data. **Autoignition Pt:**

Suitable Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry

chemical, carbon dioxide, alcohol-resistant foam, or water spray.

As in any fire, wear a self-contained breathing apparatus in pressure-demand, Fire Fighting Instructions:

> MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible. Decomposes at high temperatures, resulting in toxic and corrosive

products. Runoff from fire control or dilution water may cause pollution.

Flammable Properties and

Hazards:

No data available.

Hazardous Combustion

No data available.

Products:

6. Accidental Release Measures

Protective Precautions.

Protective Equipment and **Emergency Procedures:**

Splash proof safety goggles.

Environmental Precautions:

Avoid release to the environment.

Do not let product enter drains.

Steps To Be Taken In Case

Use proper personal protective equipment as indicated in Section 8.

Material Is Released Or

Spilled:

Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Do not let this product enter the environment except as directed on product label. Clean up spills

immediately, observing precautions in the Protective Equipment section.



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Personal precautions.

Use personal protective equipment.

PROCEDURES & PERSONAL PRECAUTIONS.

Exercise appropriate caution to avoid contact with skin and eyes, and avoid breathing

vapors, fumes, and mist.

Methods for cleaning up.

Ventilate area and wash spill site after material pickup is complete.

7. Handling and Storage

Precautions To Be Taken in ...

Handling:

Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Use only in a well-ventilated

area. Keep container tightly closed. Wash clothing before reuse.

Precautions To Be Taken in

Keep container closed when not in use.

Storing:

8. Exposure Controls/Personal Protection

CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Limits

10294-66-3 Potassium thiosulphate No data. No data. No data.

Respiratory Equipment

(Specify Type):

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or

type ABEK-P2 (EU EN 143) respirator cartridges.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure. Wash and dry hands.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls

(Ventilation etc.):

Facilities storing or utilizing this material should be equipped with an eyewash facility and

a safety shower.

Work/Hygienic/Maintenance

Practices:

Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday. Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Clear. colored.

Ammoniacal odor.

pH: 6.0 - 7.0

Melting Point: No data.

Boiling Point: > 100 C

Flash Pt: No data.

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure (vs. Air or

mm Hg):

No data.

Vapor Density (vs. Air = 1): No o

No data.



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Specific Gravity (Water = 1): 1.1 - 1.4

Density: 12.200000 LB/GA

Solubility in Water: No data.

Solubility Notes: Infinitely miscible with water.

Octanol/Water Partition

Coefficient:

No data. **Autoignition Pt: Decomposition Temperature:** No data. Viscosity: No data.

10. Stability and Reactivity

Stable. However, may decompose if heated. Reactivity:

Stability: Unstable [] Stable [X]

Conditions To Avoid -

Incompatible materials, dust generation, heating to decomposition. High temperatures.

Instability:

Incompatibility - Materials To Strong oxidizing agents, bases, acids, aluminum.

Hazardous Decomposition or Carbon monoxide, oxides of nitrogen, Carbon dioxide, oxides of sulfur, nitrogen oxides

(NOx) and ammonia (NH3). Nitrogen oxides, oxides of phosphorus, Ammonia, Oxides of Byproducts:

potassium, Hydrogen chloride, chlorine, irritating and toxic fumes and gases.

Possibility of Hazardous

Reactions:

Will occur [] Will not occur [X]

Conditions To Avoid -No data available.

Hazardous Reactions:

11. Toxicological Information

Toxicological Information: Epidemiology: No information found.

Teratogenicity: No information available.

Tumorigenic effects have been reported in experimental animals.

Teratogenicity: Teratogenic effects have occurred in experimental animals.

Adverse reproductive effects have occurred in experimental animals.

Neurotoxic effects have occurred in experimental animals.

Reproductive toxicity - no data available.

Inhalation: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity/Other

Carcinogenicity

Information:

CAS# **Hazardous Components (Chemical Name) NTP** IARC **ACGIH OSHA** 10294-66-3 Potassium thiosulphate n.a. n.a. n.a. n.a.

12. Ecological Information

General Ecological Information:

Environmental: If released to the atmosphere, urea will degrade rapidly in the vapor-phase by reaction with photochemically produced hydroxyl radicals (half-life of 9.6 hr). If released to soil, urea is hydrolyzed to ammonium through soil urease activity (the basis of its use as a fertilizer). The rate of hydrolysis can be fast (24 hr); however, a number of variables (such as increasing the pellet size of the fertilizer) can decrease the degradation rate.

Urea will dissolve and disperse in water, and will promote algae growth which may degrade water quality and taste. Notify downstream water users of any release that

may affect water quality.

GHS format



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Do not empty into drains.

Persistence and

No data available.

Degradability:

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. Disposal Considerations

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified

as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Observe all federal, state, and local environmental regulations. Contact a licensed

professional waste disposal service to dispose of this material.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

Potassium thiosulphate

DOT Hazard Class: UN/NA Number:

10294-66-3

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

10294-66-3 Potassium thiosulphate No No No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

CAS#	Hazardous Components (Chemical Name)	Other US FPA or State Lists	
[] Yes [X] No	(Physical) Hazard Not Otherwise Classified (HNOC)		
[] Yes [X] No	Combustible Dust		
[] Yes [X] No	In contact with water emits flammable gas	[] Yes [X] No	(Health) Hazard Not Otherwise Classified (HNOC)
[] Yes [X] No	Gas under pressure (compressed gas)	[] Yes [X] No	Simple Asphyxiant
[] Yes [X] No	Corrosive to metal	[] Yes [X] No	Aspiration Hazard
[] Yes [X] No	Organic peroxide	[] Yes [X] No	Specific target organ toxicity (single or repeated exposure)
[] Yes [X] No	Self-heating	[] Yes [X] No	Reproductive toxicity
[] Yes [X] No	Pyrophoric gas	[] Yes [X] No	Carcinogenicity
[] Yes [X] No	Pyrophoric (liquid or solid)	[] Yes [X] No	Germ cell mutagenicity
[] Yes [X] No	Self-reactive	[] Yes [X] No	Respiratory or Skin Sensitization
[] Yes [X] No	Oxidizer (liquid, solid or gas)	[] Yes [X] No	Serious eye damage or eye irritation
[] Yes [X] No	Flammable (gases, aerosols, liquid, or solid)	[] Yes [X] No	Skin Corrosion or Irritation
[] Yes [X] No	Explosive	[X] Yes [] No	Acute toxicity (any route of exposure)

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No



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16. Other Information

04/23/2019 Revision Date:

Hazard Rating System:

Instability Flammability NFPA: Special Hazard

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

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