

TCS GrowStar Professional Turf Fertilizer with AMP XC (10-0-20)

Printed: 03/30/2022

Revision: 03/30/2022

Supersedes Revision: 06/14/2018

1. Product and Company Identification

Product Code:	903898	
Product Name:	TCS GrowStar Professional Turf Fertilizer with AMP XC (10-0-20)	
Company Name:	Turf Care Supply LLC	Phone Number:
	50 Pearl Road	1 (330)558-0910
	Suite 200	
	Brunswick, OH 44212	
Web site address:	www.turfcaresupply.com	
Email address:	regaffairs@tcscusa.com	
Emergency Contact:	PERS	1 (800)633-8253
Information:	Turf Care Supply LLC	1 (330)558-0910
Synonyms:	Granular Fertilizer	

2. Hazards Identification

Acute Toxicity: Oral, Category 4



GHS Signal Word:	Warning
GHS Hazard Phrases:	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause damage to respiratory system and lungs through prolonged or repeated exposure.
GHS Precautionary Phrases:	Avoid breathing dust. Wear protective gloves, protective clothing, and eye protection. Call a POISON CENTER or doctor/physician if you feel unwell.
GHS Response Phrases:	If eye irritation persists, get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
GHS Storage and Disposal Phrases:	Store in a diked or contained area to prevent uncontrolled release to the environment. Store in a closed container. If material cannot be completely used according to label directions, dispose of container and contents according to section 13.
Potential Health Effects (Acute and Chronic):	Chronic: Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated exposure may cause permanent eye damage. Chronic exposure may cause lung damage. Effects may be delayed.
Inhalation:	May be harmful if inhaled. Low hazard for normal industrial handling. The toxicological 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. Dust causes mechanical irritation. Low hazard for usual industrial handling.
Eye Contact:	May cause eye irritation. Dust may cause mechanical 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
7447-40-7	Potassium chloride	33.3 %
57-13-6	Urea	21.7 %
1309-37-1	Iron oxide (Fe ₂ O ₃)	14.3 %
1317-65-3	Limestone	8.46 - 10.3 %
1344-43-0	Manganese oxide	6.46 - 6.82 %
112926-00-8	Precipitated silica	0.715 - 1.43 %
68514-28-3	Humic acids, potassium salts	1.00 %
7778-18-9	Calcium sulfate	0.600 - 1.00 %
14808-60-7	Quartz	0.482 - 0.825 %
64742-65-0	Mineral Oil	0.750 %

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: Get medical aid if irritation develops or persists. 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.

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

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: No data.

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

Autoignition Pt: No data.

Suitable Extinguishing Media: 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.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, 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: Most of the components of this product are non-combustible. However, a portion of them may support combustion at elevated temperatures.

Hazardous Combustion Products: Thermal decomposition may result in the production of ammonia, formaldehyde, biuret, chlorine, cyanic acid, and cyanide, and oxides of carbon, nitrogen, phosphorus, potassium, sulfur, and chlorine, and oxides of alkaline earth metals, and certain heavier metals used as nutrients in fertilizer products, such as copper, iron, manganese, and

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zinc, and other toxic and irritating fumes and gases.

6. Accidental Release Measures

**Steps To Be Taken In Case
Material Is Released Or
Spilled:**

Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. 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.

Personal precautions.

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions.

Do not let product enter drains.

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

PROCEDURES & PERSONAL PRECAUTIONS.

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

Methods for cleaning up.

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. 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. Minimize dust generation and accumulation. 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.

Provide appropriate exhaust ventilation at places where dust is formed.

**Precautions To Be Taken in
Storing:**

Store in a cool, dry place. Keep container closed when not in use.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7447-40-7	Potassium chloride	No data.	No data.	No data.
57-13-6	Urea	No data.	No data.	No data.
1309-37-1	Iron oxide (Fe ₂ O ₃)	PEL: 10 mg/m ³	TLV: 5 mg/m ³ (dust & fume)	No data.
1317-65-3	Limestone	PEL: 15 (dust); 5 (resp.) mg/m ³	No data.	No data.
1344-43-0	Manganese oxide	CEIL: 5 mg/m ³	TWA: 0.02 mg/m ³ (resp.) 0.1 mg/m ³ (IHL)	No data.
112926-00-8	Precipitated silica	PEL: 80 mg/m ³ /(%SiO ₂)	TLV: 10 mg/m ³	No data.
68514-28-3	Humic acids, potassium salts	No data.	No data.	No data.
7778-18-9	Calcium sulfate	PEL: 15 (dust); 5 (resp.) mg/m ³	TLV: 10 mg/m ³ (IHL)	No data.

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Additional Physical Information: The melting point and decomposition temperatures cited are for the urea component of this product, if present. See section 3.
Urea decomposes before boiling. (UNEP Publication, OECD SIDS UREA, CAS No: 57-13-6)

Information with regard to primary physical hazard:

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid - Instability: Incompatible materials, dust generation, heating to decomposition. High temperatures.

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

Hazardous Decomposition or Byproducts: The decomposition of fertilizer products may result in the generation of some or all of the following: ammonia, formaldehyde, biuret, chlorine, cyanic acid, and cyanide, and oxides of carbon, nitrogen, phosphorus, potassium, sulfur, and chlorine, and oxides of alkaline earth metals, and certain heavier metals used as nutrients in fertilizer products, such as copper, iron, manganese, and zinc, and other irritating and toxic fumes and gases.

Possibility of Hazardous Reactions: Will occur [] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: No data available.

11. Toxicological Information

Toxicological Information: Epidemiology: No information found.
Teratogenicity: Teratogenic 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 Information: This material may contain small amounts of respirable crystalline and amorphous silica. The International Agency for Cancer Research (IARC) has classified crystalline silica as a carcinogen to humans (Group 1), and amorphous silica as not classifiable as to its carcinogenicity to humans (Group 3). See "Silica, Some Silicates, Coal dust and para-Aramid Fibrils in IARC Monographs on the Evaluation of Carcinogenic Risks to Humans", (Vol. 68).

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7447-40-7	Potassium chloride	n.a.	n.a.	n.a.	n.a.
57-13-6	Urea	n.a.	n.a.	n.a.	n.a.
1309-37-1	Iron oxide (Fe ₂ O ₃)	n.a.	3	A4	n.a.
1317-65-3	Limestone	n.a.	n.a.	n.a.	n.a.
1344-43-0	Manganese oxide	n.a.	n.a.	n.a.	n.a.
112926-00-8	Precipitated silica	n.a.	n.a.	n.a.	n.a.
68514-28-3	Humic acids, potassium salts	n.a.	n.a.	n.a.	n.a.
7778-18-9	Calcium sulfate	n.a.	n.a.	n.a.	n.a.
14808-60-7	Quartz	Known	1	A2	n.a.
64742-65-0	Mineral Oil	n.a.	n.a.	n.a.	n.a.

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12. Ecological Information

General Ecological Information:	<p>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.</p> <p>Do not empty into drains.</p> <p>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.</p>
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.

13. Disposal Considerations

Waste Disposal Method:	<p>If material cannot be completely used according to label directions, dispose of container and contents according to this section.</p> <p>Contact a licensed professional waste disposal service to dispose of this material.</p> <p>Do not let product enter drains.</p> <p>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.</p> <p>RCRA P-Series: None listed. RCRA U-Series: None listed.</p> <p>Observe all federal, state, and local environmental regulations.</p>
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14. Transport Information

LAND TRANSPORT (US DOT):	
DOT Proper Shipping Name:	Not Regulated.
DOT Hazard Class:	
UN/NA Number:	

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)
7447-40-7	Potassium chloride	No	No	No
57-13-6	Urea	No	No	No
1309-37-1	Iron oxide (Fe ₂ O ₃)	No	No	No
1317-65-3	Limestone	No	No	No
1344-43-0	Manganese oxide	No	No	Yes-Cat. N450

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112926-00-8	Precipitated silica	No	No	No
68514-28-3	Humic acids, potassium salts	No	No	No
7778-18-9	Calcium sulfate	No	No	No
14808-60-7	Quartz	No	No	No
64742-65-0	Mineral Oil	No	No	No

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

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxidizer (liquid, solid or gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7447-40-7	Potassium chloride	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
57-13-6	Urea	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
1309-37-1	Iron oxide (Fe ₂ O ₃)	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: Yes - 1
1317-65-3	Limestone	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: Yes - 1
1344-43-0	Manganese oxide	CAA HAP,ODC: Yes - Cat.; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: Yes - Cat.; NJ EHS: Yes - Cat.; NY Part 597: No; PA HSL: No
112926-00-8	Precipitated silica	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: Yes - 1
68514-28-3	Humic acids, potassium salts	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
7778-18-9	Calcium sulfate	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: Yes - 1
14808-60-7	Quartz	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: Yes - 1
64742-65-0	Mineral Oil	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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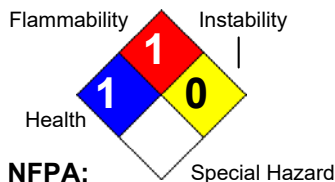
Printed: 03/30/2022
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16. Other Information

Revision Date: 03/30/2022

Previous revision: 06/14/2018

Hazard Rating System:



Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and Turf Care Supply LLC disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purposes.