Trigon Turf 10-0-20 fertilizer

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 10/14/2022 Date of Issue: 09/14/2022 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Trigon Turf 10-0-20 fertilizer

1.2. Intended Use of the Product

Use of the Substance/Mixture: Fertilizer

1.3. Name, Address, and Telephone of the Responsible Party

Trigon Turf Sciences LLC
16051 Collins Ave., # 1502
33160 Sunny Isles Beach - US
T 757-220-4466

1.4. Emergency Telephone Number

Emergency Number : (800)255-3924
VelocityEHS
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Serious eye damage/eye irritation Category 2	H319
Hazardous to the aquatic environment - Acute Hazard Category 3	H402
Hazardous to the aquatic environment - Chronic Hazard Category 3	H412
Combustible Dust	

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS07

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : May form combustible dust concentrations in air.
H319 - Causes serious eye irritation.
H402 - Harmful to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Supplemental Information : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	%	GHS US classification
Sulfuric acid, dipotassium salt	Sulfuric acid dipotassium salt / Potassium sulfate / Potassium sulfate (2:1) / Dipotassium sulfate / Potassium sulphate / Dipotassium sulphate / Sulfuric acid potassium salt (1:2) / POTASSIUM SULFATE / potassium sulfate	(CAS-No.) 7778-80-5	36.5	Not classified
Urea	Carbamide / Carbonyl diamide / UREA / Carbonic acid diamide	(CAS-No.) 57-13-6	10	Comb. Dust
Magnesium sulfate heptahydrate	Sulfuric acid, magnesium salt (1:1), heptahydrate / Sulfuric acid, magnesium salt, heptahydrate / Sulfuric acid, magnesium salt, heptahydrate (1:1:7) / Magnesium(II) sulfate, heptahydrate / Magnesium sulphate heptahydrate	(CAS-No.) 10034-99-8	9.5	Not classified
Urea, polymer with formaldehyde	Formaldehyde copolymer with urea / Formaldehyde-urea condensate / Formaldehyde-urea precondensate / Resin, urea formaldehyde / Urea-formaldehyde adduct / Urea-formaldehyde condensate / Urea-formaldehyde copolymer / Urea-formaldehyde precondensate / Polynoxylin / Formaldehyde-urea copolymer / Urea formaldehyde polymer / Urea formaldehyde resin / Urea-formaldehyde polycondensate / Urea-formaldehyde resin / Formaldehyde urea / Carbomol / Ponoxylan / Polyoxymethylene urea / Urea-formaldehyde / POLYOXYMETHYLENE UREA / polynoxylin	(CAS-No.) 9011-05-6	7.5	Comb. Dust
Potassium magnesium sulfate (Mg2K2(SO4)3)	Potassium magnesium sulfate	(CAS-No.) 14977-37-8	5	Not classified
Calcium sulfate dihydrate	Calcium sulfate, dihydrate / Sulfuric acid, calcium salt, dihydrate / Sulphuric acid, calcium salt (1:1), dihydrate / Sulfuric acid, calcium salt (1:1), dihydrate / Sulfuric acid, calcium salt, hydrate (1:1:2) / Pigment White 25 / C.I. 77231 / CALCIUM SULFATE HYDRATE	(CAS-No.) 10101-41-4	4.5	Not classified
Sulfuric acid, iron(2+) salt (1:1), monohydrate	Iron(2+) sulfate monohydrate / Iron(II) sulfate, monohydrate / Ferrous sulfate monohydrate / Iron(II) sulfate monohydrate / Iron sulfate monohydrate	(CAS-No.) 17375-41-6	1.75	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2B, H320

Humic acids	Humic acid / Humic acids (The brown polymeric product from the decomposition of organic matter, particularly dead plants. This combination of polymers may contain aromatic and heterocyclic structures, carboxy groups, and nitrogen.) / HUMIC ACIDS	(CAS-No.) 1415-93-6	1.25	Comb. Dust Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Zinc sulfate, monohydrate	Sulfuric acid, zinc salt (1:1), monohydrate / Zinc sulphate monohydrate / Zinc sulfate monohydrate / Zinc sulphate, monohydrate / Zinc sulphate (hydrous) / zinc sulfate monohydrate	(CAS-No.) 7446-19-7	0.75	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Causes serious eye irritation.

Symptoms/Injuries After Inhalation: Dust may be harmful or cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva. . May cause mechanical eye irritation.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, or dry chemical. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible Dust.

Explosion Hazard: Dust explosion hazard in air.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Metallic oxides. Sulfur oxides. Highly toxic and corrosive gases are released.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. Risk of dust explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Eliminate ignition sources. Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Remove ignition sources. Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing dust. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Fertilizer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Urea (57-13-6)		
USA AIHA	WEEL TWA	10 mg/m³

Calcium sulfate dihydrate (10101-41-4)		
USA ACGIH	ACGIH OEL TWA	10 mg/m³ (inhalable particulate matter (Calcium sulfate)

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Personal Protective Equipment : Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Wear protective gloves.

Eye and Face Protection : Chemical safety goggles.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Granular Solid
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard).

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Metallic oxides. Sulfur oxides. Highly toxic and corrosive gases and vapors are released.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

Sulfuric acid, dipotassium salt (7778-80-5)	
LD50 Oral Rat	6600 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

Urea (57-13-6)	
LD50 Oral Rat	8471 mg/kg

Urea, polymer with formaldehyde (9011-05-6)	
LD50 Oral Rat	8394 mg/kg
LD50 Dermal Rat	> 2100 mg/kg
LC50 Inhalation Rat	> 167 mg/m³ (Exposure time: 4 h)

Sulfuric acid, iron(2+) salt (1:1), monohydrate (17375-41-6)	
ATE (Oral)	500.00 mg/kg body weight

Zinc sulfate, monohydrate (7446-19-7)	
LD50 Oral Rat	926 mg/kg (Zinc Sulfate, anhydrous)

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Dust may be harmful or cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva. . May cause mechanical eye irritation.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Harmful to aquatic life with long lasting effects.

Sulfuric acid, dipotassium salt (7778-80-5)	
LC50 Fish 1	653 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
EC50 - Crustacea [1]	890 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	3550 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Urea (57-13-6)	
LC50 Fish 1	16200 – 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 - Crustacea [1]	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and Degradability

Trigon Turf 10-0-20 fertilizer	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Trigon Turf 10-0-20 fertilizer	
Bioaccumulative Potential	Not established.

Urea (57-13-6)	
BCF Fish 1	(10 dimensionless)
Partition coefficient n-octanol/water (Log Pow)	< -1.73 (at 22 °C)

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information : Avoid unnecessary release into the environment. Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Treatment Methods: Can be landfilled, when in compliance with local regulations.

Sewage Disposal Recommendations: Do not dispose of waste into sewer. Do not empty into drains.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid unnecessary release into the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Not regulated for transport

14.2. In Accordance with IMDG

Not regulated for transport

14.3. In Accordance with IATA

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Trigon Turf 10-0-20 fertilizer	
SARA Section 311/312 Hazard Classes	Health hazard - Serious eye damage or eye irritation Physical hazard - Combustible dust

Sulfuric acid, dipotassium salt (7778-80-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Urea (57-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Urea, polymer with formaldehyde (9011-05-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Humic acids (1415-93-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

15.2. US State Regulations

Neither this product nor its chemical components appear on any US state lists, or its chemical components are not required to be disclosed

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 10/14/2022

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life

H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)