

Advanced Turf Professional Turf Fertilizer

Revision: 12/03/2014

22-0-22 60% MU SOP Greens Grade

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: 495-9010
Product Name: Advanced Turf Professional Turf Fertilizer 22-0-22 60% MU SOP Greens Grade
Company Name: Advanced Turf Solutions
 12840 Ford Drive
 Fishers, IN 46038

Emergency Contact: Chemtrec (800)424-9300
Information: Product Related (715)876-6422

2. HAZARDS IDENTIFICATION

Serious Eye Damage/Eye Irritation, Category 2A

Acute Toxicity: Inhalation, Category 4

Acute Toxicity: Oral, Category 4

Skin Corrosion/Irritation, Category 2



GHS Signal Word: Warning

GHS Hazard Phrases: Causes serious eye irritation.
 Harmful if inhaled.
 Harmful if swallowed.
 Causes skin irritation.

GHS Precaution Phrases: Wash hands thoroughly after handling.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Use only outdoors or in a well-ventilated area.
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 Do not eat, drink or smoke when using this product.
 Take off contaminated clothing and wash it before reuse.
 Keep out of reach of children.

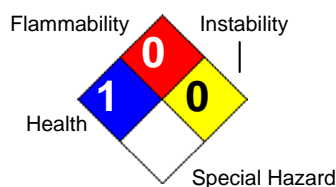
GHS Response Phrases: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists, get medical advice/attention.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 Call a POISON CENTER or doctor/physician if you feel unwell.
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 Rinse mouth.
 IF ON SKIN: Wash with plenty of soap and water. If skin irritation persists, get medical advice/attention.

GHS Storage and Disposal Phrases: Dispose of contents/container in accordance with local/regional/national/international regulations.

SAFETY DATA SHEET

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Hazard Rating System:**Potential Health Effects
(Acute and Chronic):**

Acute: May cause respiratory tract irritation.
Chronic: Not expected to be a chronic hazard.

Inhalation:

May be harmful if inhaled. Inhalation of dust may cause respiratory tract irritation.

Skin Contact:

May cause skin irritation. May be harmful if absorbed through the skin.

Eye Contact:

Dust may cause mechanical irritation. May cause eye irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS # | Hazardous Components (Chemical Name) | Concentration |
|-----------|--------------------------------------|---------------|
| NA | Other Non-Hazardous Ingredients | 2.0 -85.0 % |
| 57-13-6 | Urea | 11.0 -92.0 % |
| 1319-33-1 | Sodium Borate | < 1.0 % |
| 1317-38-0 | Copper oxide | < 1.0 % |
| 1309-37-1 | Iron oxide | < 1.0 % |
| 1344-43-0 | Manganese oxide | < 1.0 % |
| 1314-13-2 | Zinc oxide | < 1.0 % |
| 9011-05-6 | Urea formaldehyde | 8.0 -76.0 % |
| 7778-80-5 | Potassium sulfate | 3.0 -60.0 % |

4. FIRST AID MEASURES

Emergency and First Aid**Procedures:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. Get medical aid.

In Case of Inhalation:**In Case of Skin Contact:**

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

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 if irritation develops and persists.

In Case of Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. For further assistance, contact your local Poison Control Center 1-800-222-1222.

Note to Physician:

Treat symptomatically and supportively.

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5. FIRE FIGHTING MEASURES

| | |
|--|---|
| Flash Pt: | No data. |
| Explosive Limits: | LEL: No data. UEL: No data. |
| Autoignition Pt: | No data. |
| Suitable Extinguishing Media: | Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam. |
| 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use extinguishing media appropriate to surrounding fire conditions. Substance is noncombustible. Decomposes at high temperatures, resulting in toxic and corrosive products. Water runoff can cause environmental damage. Dike and collect water used to fight fire. |
| Flammable Properties and Hazards: | No data available. |

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. |
|---|--|

7. HANDLING AND STORAGE

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|---|---|
| Precautions To Be Taken in Handling: | Wash hands thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse. Avoid breathing dust, mist, or vapor. |
| Precautions To Be Taken in Storing: | Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances, inaccessible to children and domestic animals. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS # | Partial Chemical Name | OSHA TWA | ACGIH TWA | Other Limits |
|-----------|---------------------------------|---|--------------------------------------|--------------|
| NA | Other Non-Hazardous Ingredients | No data. | No data. | No data. |
| 57-13-6 | Urea | PEL: PNOR 15 Total 5 Resp. mg/m3 | TLV: PNOS 10 Inhalable 3 Resp. mg/m3 | No data. |
| 1319-33-1 | Sodium Borate | No data. | No data. | No data. |
| 1317-38-0 | Copper oxide | PEL: 1 mg/m3 | TLV: 1 mg/m3 | No data. |
| 1309-37-1 | Iron oxide | PEL: 10 mg/m3 | TLV: 5 mg/m3 | No data. |
| 1344-43-0 | Manganese oxide | PEL: NIOSH 1 mg/m3 STEL: NIOSH 3 mg/m3 | No data. | No data. |
| 1314-13-2 | Zinc oxide | PEL: 15 Total 5 Respirable mg/m3 | TLV: 2 mg/m3 STEL: 10 mg/m3 | No data. |
| 9011-05-6 | Urea formaldehyde | PEL: PNOR 15 Total 5 Resp. mg/m3 | TLV: PNOS 10 Inhalable 3 Resp. mg/m3 | No data. |
| 7778-80-5 | Potassium sulfate | PEL: PNOR 15 Total 5 Resp. mg/m3 | TLV: PNOS 10 Inhalable 3 Resp. mg/m3 | No data. |

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| Respiratory Equipment (Specify Type): | A respiratory protection program that meets OSHA's 29 CFR 1910.134. |
| Eye Protection: | Safety glasses with side-shields conforming to ANSI Z-87. |
| Protective Gloves: | Wear appropriate protective gloves to prevent skin exposure. |
| 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. Use adequate ventilation to keep airborne concentrations low. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|------------------------------|---------------------------------|---|
| Physical States: | <input type="checkbox"/> Gas | <input type="checkbox"/> Liquid | <input checked="" type="checkbox"/> Solid |
| Appearance and Odor: | Various Colors. | | |
| Melting Point: | No data. | | |
| Boiling Point: | No data. | | |
| Autoignition Pt: | No data. | | |
| Flash Pt: | No data. | | |
| Explosive Limits: | LEL: No data. | | UEL: No data. |
| Specific Gravity (Water = 1): | No data. | | |
| Vapor Pressure (vs. Air or mm Hg): | No data. | | |
| Vapor Density (vs. Air = 1): | No data. | | |
| Evaporation Rate: | No data. | | |
| Solubility in Water: | No data. | | |
| Percent Volatile: | No data. | | |

10. STABILITY AND REACTIVITY

| | | |
|---|--|--|
| Stability: | Unstable <input type="checkbox"/> | Stable <input checked="" type="checkbox"/> |
| Conditions To Avoid - Instability: | dust generation, Incompatible materials. | |
| Incompatibility - Materials To Avoid: | Strong bases, Strong oxidizing agents, DICHROMATES, liquid chlorine, nitrates, permanganates, chromyl chloride. | |
| Hazardous Decomposition Or Byproducts: | oxides of phosphorus, nitrogen oxides (NOx) and ammonia (NH3). oxides of sulfur, Oxides of potassium, Carbon monoxide, oxides of nitrogen, Carbon dioxide. | |
| Possibility of Hazardous Reactions: | Will occur <input type="checkbox"/> | Will not occur <input checked="" type="checkbox"/> |
| Conditions To Avoid - Hazardous Reactions: | No data available. | |

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11. TOXICOLOGICAL INFORMATION

Toxicological Information: No data available.

| CAS # | Hazardous Components (Chemical Name) | NTP | IARC | ACGIH | OSHA |
|-----------|--------------------------------------|------|------|-------|------|
| NA | Other Non-Hazardous Ingredients | n.a. | n.a. | n.a. | n.a. |
| 57-13-6 | Urea | n.a. | n.a. | n.a. | n.a. |
| 1319-33-1 | Sodium Borate | n.a. | n.a. | n.a. | n.a. |
| 1317-38-0 | Copper oxide | n.a. | n.a. | n.a. | n.a. |
| 1309-37-1 | Iron oxide | n.a. | 3 | A4 | n.a. |
| 1344-43-0 | Manganese oxide | n.a. | n.a. | n.a. | n.a. |
| 1314-13-2 | Zinc oxide | n.a. | n.a. | n.a. | n.a. |
| 9011-05-6 | Urea formaldehyde | n.a. | n.a. | n.a. | n.a. |
| 7778-80-5 | Potassium sulfate | n.a. | n.a. | n.a. | n.a. |

12. ECOLOGICAL INFORMATION

General Ecological Information: Environmental: No information available.
Physical: No information 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.

14. TRANSPORT INFORMATION

GHS Classification: Serious Eye Damage/Eye Irritation, Category 2A - Warning! Causes serious eye irritation
Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled
Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class:

UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

| CAS # | Hazardous Components (Chemical Name) | Other US EPA or State Lists |
|-----------|--------------------------------------|---|
| NA | Other Non-Hazardous Ingredients | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; WI Air: No |
| 57-13-6 | Urea | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory, 8A CAIR; CA PROP.65: No; CA TAC, Title 8: No; WI Air: No |
| 1319-33-1 | Sodium Borate | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; WI Air: No |

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|-----------|-------------------|---|
| 1317-38-0 | Copper oxide | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; WI Air: No |
| 1309-37-1 | Iron oxide | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; WI Air: Yes |
| 1344-43-0 | Manganese oxide | CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; WI Air: Yes - Cat. |
| 1314-13-2 | Zinc oxide | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; WI Air: No |
| 9011-05-6 | Urea formaldehyde | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: No; WI Air: No |
| 7778-80-5 | Potassium sulfate | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Inventory; CA PROP.65: No; CA TAC, Title 8: No; WI Air: No |

16. OTHER INFORMATION

Revision Date: 12/03/2014

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

This Safety Data Sheet (SDS) is to be used as a reference to address the safe handling of the product. All statements, technical information and recommendations contained herein are to the best of our knowledge, reliable and accurate. This SDS is not intended to make any representation as to how the product will perform when used as intended. Nothing in this SDS is intended to be a representation or warranty by the manufacturer with regard to accuracy, safety, usefulness, technical information, materials, techniques, or practices. This product is sold "AS IS" and nothing in this SDS should be deemed to be a representation or warranty of any injury, loss, or damage of any kind sustained by, or arise from, the use of this product.