Safety Data Sheet

Section 1: Identification

Product identifier

Product Name: Pennington® UltraGreen® Starter Fertilizer 12-22-8

Synonyms: 100519393; 100519554; 100519555; 100519570; Lawn Fertilizer; UPC # 0-21496-01326-8; UPC # 0-21496-01380-0

Product Description: Brown with blue-green, grey, white free flowing granules.

Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Fertilizer

Restrictions on use: Avoid contact with skin and eyes. Prevent large spills from entering sewers, watercourses and wells. Keep out of reach of children.

Details of the supplier of the safety data sheet

Manufacturer: Central Garden & Pet Company, Garden Division
1000 Parkwood Circle, Suite 700
Atlanta, GA 30339
United States
www.penningtonfertilizer.com

Emergency telephone number

Manufacturer: 1-800-265-0761
Manufacturer (Transportation): 1-800-424-9300 - CHEMTREC
Manufacturer (Transportation): 1-703-527-3887 - CHEMTREC - Outside US Collect Calls Accepted

Section 2: Hazard Identification

United States (US)
According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012: Skin Irritation 2 - H315
Eye Mild Irritation 2B - H320
Carcinogenicity 1A - H350
Specific Target Organ Toxicity Repeated Exposure 1 - H372

Label elements

OSHA HCS 2012

DANGER

Hazard statements: Causes skin irritation - H315
May cause cancer. - H350
Causes damage to organs through prolonged or repeated exposure. - H372
Eye Mild Irritation 2B - H320

Precautionary statements

Prevention
- Wash thoroughly after handling. - P264
- Avoid breathing dust, fume, gas, mist, vapors and/or spray. - P261
- Wear protective gloves.
- Read label before use. - P103
- Do not handle until all safety precautions have been read and understood. - P202
- Obtain special instructions before use. - P201

Response
- If eye irritation persists: Get medical advice/attention. - P337+P313
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
- If skin irritation or rash occurs: Get medical advice/attention. - P333+P313
- Specific treatment, see supplemental first aid information. - P321
- IF ON SKIN: Gently wash with plenty of soap and water. - P302+P350
- Get medical advice/attention if you feel unwell. - P314
- Take off immediately all contaminated clothing and wash it before reuse.

Storage/Disposal
- Store in a cool, dry place
- Refer to Section 13 - Disposal Considerations
- Store locked up. - P405

Other hazards

OSHA HCS 2012

Section 3 - Composition/Information on Ingredients

Substances
- Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muriate of Potash</td>
<td>CAS:7447-40-7</td>
<td>15% TO 20%</td>
</tr>
<tr>
<td>Urea Nitrogen Sources</td>
<td>CAS:57-13-6</td>
<td>15% TO 20%</td>
</tr>
<tr>
<td>Dolomite</td>
<td>CAS:16389-88-1</td>
<td>17% TO 23%</td>
</tr>
<tr>
<td>Silica, crystalline - quartz</td>
<td>[N/A]</td>
<td>N/A</td>
</tr>
<tr>
<td>Phosphoric acid, ammonium salt (1:1)</td>
<td>CAS:7722-76-1</td>
<td>40% TO 50%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- Get medical attention if symptoms occur. If signs/symptoms develop, move person to fresh air.

Skin
- If irritation develops and persists, get medical attention. IF ON SKIN: Wash with plenty of soap and water.
Eye

- 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. Continue rinsing.

Ingestion

- If irritation develops and persists, get medical attention. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
- If medical advice is needed, have product container or label at hand.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- LARGE FIRE: Water spray, fog or regular foam.
- SMALL FIRES: Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media
- None known.

Firefighting Procedures
- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions.
- Do not walk through spilled material.
- Keep unauthorized personnel away.
- Ventilate closed spaces before entering.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Reacts with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing fire and explosion hazard.

Hazardous Combustion Products
- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Advice for firefighters
- Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Do not walk through spilled material. Avoid dust formation and breathing dust.

Emergency Procedures
- Keep unauthorized personnel away. Stay upwind.

Environmental precautions
- Do not allow runoff into water, storm drains or drainage ditches.

Methods and material for containment and cleaning up

Containment/Clean-up Measures
- Sweep up material and place in suitable container for disposal.
- Cover with plastic sheet to prevent spreading.

Section 7 - Handling and Storage

Precautions for safe handling

Handling
- Avoid breathing dust. Avoid contact with skin, eyes, and clothing. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities
Storage
- Keep container/package tightly closed in a cool, well-ventilated place.

Incompatible Materials or Ignition Sources
- Strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates.

Section 8 - Exposure Controls/Personal Protection

Control parameters

<table>
<thead>
<tr>
<th>Exposure Limits/Guidelines</th>
<th>Result</th>
<th>ACGIH</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, crystalline - quartz (14808-60-7)</td>
<td>TWAs</td>
<td>0.025 mg/m³ TWA (respirable fraction)</td>
<td>0.05 mg/m³ TWA (respirable dust)</td>
</tr>
</tbody>
</table>

Exposure Control Notations
ACGIH
- Silica, crystalline - quartz (14808-60-7): Carcinogens: (A2 - Suspected Human Carcinogen)

Exposure Limits Supplemental
OSHA
- Silica, crystalline - quartz (14808-60-7): Mineral Dusts: ((30) (%SiO₂ + 2) mg/m³ TWA, total dust; (250) (%SiO₂ + 5) mppcf TWA, respirable fraction; (10) (%SiO₂ + 2) mg/m³ TWA, respirable fraction)

ACGIH
- Silica, crystalline - quartz (14808-60-7): TLV Basis - Critical Effects: (lung cancer; pulmonary fibrosis)

Exposure controls

Engineering Measures/Controls
- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. If airborne dust is present, use appropriate respiratory protection.

Personal Protective Equipment

- Respiratory
  - If prolonged exposure is anticipated, it is recommended for handlers to wear an approved MSHA/NIOSH dust mask N-95. Not required with normal use.
- Eye/Face
  - Wear safety glasses.
- Hands
  - Wear neoprene gloves.
- Skin/Body
  - If prolonged exposure is anticipated, it is recommended for handlers to wear appropriate clothing to prevent skin contact.

Environmental Exposure Controls
- Avoid contaminating waterways and sewers.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Physical Form</th>
<th>Appearance/Description</th>
<th>General Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material Description</strong></td>
<td>Solid</td>
<td>Solid, free flowing granules.</td>
<td></td>
</tr>
<tr>
<td><strong>Appearance/Description</strong></td>
<td>Brown with blue-green, grey and white.</td>
<td>Fertilizer characteristic sulfurous.</td>
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<tr>
<td><strong>Odor Threshold</strong></td>
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<td></td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
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<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------------------</td>
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<tr>
<td>Boiling Point</td>
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</tr>
<tr>
<td>Melting Point</td>
<td>190 C (374 F)</td>
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<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
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<td></td>
</tr>
<tr>
<td>pH</td>
<td>5 in 10% water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>1.32 Water=1</td>
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<tr>
<td>Bulk Density</td>
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<td></td>
</tr>
<tr>
<td>Water Solubility</td>
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<tr>
<td>Viscosity</td>
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</tr>
<tr>
<td>Volatility</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
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<td></td>
</tr>
<tr>
<td>Vapor Density</td>
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</tr>
<tr>
<td>Evaporation Rate</td>
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<tr>
<td>VOC (Wt.)</td>
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<tr>
<td>Flammability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
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<td></td>
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<tr>
<td>LEL</td>
<td>Not relevant</td>
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<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>UEL</td>
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<tr>
<td>Autoignition</td>
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<td>Environmental</td>
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<tr>
<td>Octanol/Water Partition coefficient</td>
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</tr>
<tr>
<td>pH</td>
<td>5 in 10% water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section 10: Stability and Reactivity**

**Reactivity**
- No dangerous reaction known under conditions of normal use.

**Chemical stability**
- Stable under normal temperatures and pressures.

**Possibility of hazardous reactions**
- Reacts with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing fire and explosion hazard.

**Conditions to avoid**
- Moisture and humid conditions.

**Incompatible materials**
- Strong acids, strong reducing agents and oxidizing agents.

**Hazardous decomposition products**
- Decomposes on heating above melting point producing toxic gases.

**Section 11 - Toxicological Information**

**Information on toxicological effects**

<table>
<thead>
<tr>
<th>Components</th>
<th>Urea Nitrogen Sources (15% TO 20%)</th>
<th>Muriate of Potash (15% TO 20%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57-13-6</td>
<td>7447-40-7</td>
</tr>
<tr>
<td><strong>Acute Toxicity:</strong></td>
<td>Ingestion/Oral-Rat LD50 • 8471 mg/kg;</td>
<td>Ingestion/Oral-Rat LD50 • 2600 mg/kg;</td>
</tr>
<tr>
<td><strong>Irritation:</strong></td>
<td>Skin-Human • 22 mg 3 Day(s)-Intermittent • Mild irritation;</td>
<td>Skin-Human • 20 % 24 Hour(s) • Moderate irritation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation</td>
</tr>
</tbody>
</table>

**GHS Properties**

| Classification | OSHA HCS 2012 • Acute Toxicity - Dermal - Classification criteria not met; Acute Toxicity - Inhalation - Classification criteria not met; Acute Toxicity - Oral - Classification criteria not met |
Potential Health Effects

Inhalation

Acute (Immediate) • Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. May cause irritation.

Chronic (Delayed) • Repeated and prolonged exposure may cause lung damage - silicosis, fibrosis, inflammation, cancer.

Skin

Acute (Immediate) • May cause irritation.

Chronic (Delayed) • No data available.

Eye

Acute (Immediate) • May cause moderate irritation.

Chronic (Delayed) • No data available.

Ingestion

Acute (Immediate) • May be harmful if swallowed.

Chronic (Delayed) • No data available.

Carcinogenic Effects • Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.

<table>
<thead>
<tr>
<th>Carcinogenic Effects</th>
<th>CAS</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, crystalline - quartz</td>
<td>14808-60-7</td>
<td>Group 1-Carcinogenic</td>
<td>Known Human Carcinogen</td>
</tr>
</tbody>
</table>

Section 12 - Ecological Information

Toxicity • No data available

Persistence and degradability • No data available

Bioaccumulative potential • No data available

Mobility in Soil • No data available
Other adverse effects

- Material data lacking.

Potential Environmental Effects

- The product itself and its products of degradation are not toxic under normal conditions of use. Will release ammonium ions. Ammonia is a toxic hazard to fish.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Prevent large spills from entering sewers, watercourses and wells.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>UN number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class (es)</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>None</td>
<td>Not Regulated</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>None</td>
<td>Not Regulated</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>None</td>
<td>Not Regulated</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Special precautions for user

- None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- No data available

Other information

IMO/IMDG

- No data available

IATA/ICAO

- No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

- Acute, Chronic

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolomite</td>
<td>16389-88-1</td>
<td>Yes</td>
</tr>
<tr>
<td>Phosphoric acid, ammonium salt (1:1)</td>
<td>7722-76-1</td>
<td>Yes</td>
</tr>
<tr>
<td>Muriate of Potash</td>
<td>7447-40-7</td>
<td>Yes</td>
</tr>
<tr>
<td>Silica, crystalline - quartz</td>
<td>14808-60-7</td>
<td>Yes</td>
</tr>
<tr>
<td>Urea Nitrogen Sources</td>
<td>57-13-6</td>
<td>Yes</td>
</tr>
</tbody>
</table>

United States
Environment
U.S. - EPA - Designated Generic Categories - Aqueous Ammonia

- Dolomite 16389-88-1 Not Listed
- Muriate of Potash 7447-40-7 Not Listed
- Phosphoric acid, ammonium salt (1:1) 7722-76-1 NH3 Equiv. Wt. % = 14.80
- Urea Nitrogen Sources 57-13-6 Not Listed
- Silica, crystalline - quartz 14808-60-7 Not Listed

Section 16 - Other Information

Last Revision Date • 16/September/2014
Preparation Date • 25/June/2014
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