Section 1: Identification

Product identifier

Product Name
• Image Herbicide for St. Augustinegrass & Centipedegrass Ready-To-Spray

Synonyms
• 100099403; 100099427; 8-13576-00627-3; EPA Reg. No.: 19713-567-73342; Selective Herbicide

Product Description
• Light tan liquid.

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

Recommended use
• Herbicide.

Restrictions on use
• KEEP OUT OF THE REACH OF CHILDREN. Avoid contact with eyes and skin. Do not take internally.

Details of the supplier of the safety data sheet

Manufacturer
• Ambrands
1000 Parkwood Circle, Suite 700
Atlanta, GA 30339
United States
www.imageforweeds.com

Emergency telephone number

Manufacturer
• 1-703-527-3887 - CHEMTREC - Outside North America - Collect Calls Accepted

Manufacturer
• 1-800-424-9300 - CHEMTREC

Manufacturer
• 1-800-265-0761

Section 2: Hazard Identification

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

Classification of the substance or mixture

OSHA HCS 2012
• Acute Toxicity Inhalation 4
  Specific Target Organ Toxicity Repeated Exposure 2

Label elements

OSHA HCS 2012

WARNING
Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atrazine</td>
<td>CAS: 1912-24-9</td>
<td>4%</td>
</tr>
<tr>
<td>Related Triazines</td>
<td>NDA</td>
<td>0.08%</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>NDA</td>
<td>95.92%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor if you feel unwell.

Skin
- IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye
- IF IN EYES: Hold eye open and rinse gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Ingestion
- IF SWALLOWED: Call a poison control center or physician for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless instructed to do so by poison control or physician. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
• Harmful if inhaled, prolonged or repeated exposure may cause damage to heart. Refer to Section 11 - Toxicological Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**

• There is no specific antidote for Atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered. Treat symptomatically and supportively.

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### Section 5: Fire-Fighting Measures

**Extinguishing media**

**Suitable Extinguishing Media**

• Use water fog, foam, carbon dioxide, or dry chemical.

**Unsuitable Extinguishing Media**

• Avoid heavy hose streams.

**Firefighting Procedures**

• Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering.

**Special hazards arising from the substance or mixture**

**Unusual Fire and Explosion Hazards**

• Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Thermal decomposition during a fire can produce fumes and irritating gases.

**Hazardous Combustion Products**

• Decomposes upon heating to produce toxic vapors/gases.

**Advice for firefighters**

• Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

---

### Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**

• Use appropriate Personal Protective Equipment (PPE) Ventilate enclosed areas. Do not walk through spilled material. Wear personal protective equipment/face protection.

**Emergency Procedures**

• Do not allow runoff into water, storm drains or drainage ditches. Stay upwind. Wear appropriate personal protective equipment (PPE). Keep unauthorized personnel away.

**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**

• Absorb with earth, sand or other non-combustible material and transfer to containers. Use appropriate Personal Protective Equipment (PPE)

---

### Section 7 - Handling and Storage

**Precautions for safe handling**

**Handling**

• Avoid contact with skin, eyes, and clothing. Keep away from heat, sparks, and flame. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing fumes. Read label before use. Wash hands thoroughly with soap and water after handling. Do not take internally.

**Conditions for safe storage, including any incompatibilities**

**Storage**

• Store in cool, dry area, inaccessible to children. Store in a tightly closed container. Store in a well ventilated place. Store in original container. Avoid excessive heat.

**Incompatible Materials or Ignition Sources**

• Strong acids, strong bases, and oxidizing agents. No data available.
Section 8 - Exposure Controls/Personal Protection

Control parameters

<table>
<thead>
<tr>
<th>Exposure Limits/Guidelines</th>
<th>ACGIH</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atrazine (1912-24-9) TWAs</td>
<td>2 mg/m³ TWA (inhalable fraction)</td>
<td>5 mg/m³ TWA</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Pictograms

- Respiratory
  - If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

- Eye/Face
  - If splashes are likely to occur, wear: Safety glasses with side-shields, Goggles.

- Hands
  - Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber ("nitrile" or "NBR") or Polyvinyl chloride ("PVC" or "vinyl").

- Skin/Body
  - It is recommended for handlers to wear appropriate clothing to prevent skin contact including long sleeves, long pants, socks and shoes.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Material Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Form</td>
</tr>
<tr>
<td>Color</td>
</tr>
<tr>
<td>Odor Threshold</td>
</tr>
<tr>
<td>Appearance/Description</td>
</tr>
<tr>
<td>Odor</td>
</tr>
<tr>
<td>Odor Threshold</td>
</tr>
</tbody>
</table>

General Properties

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>103 °C (217.4 °F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>5 - 8.5 (5% aqueous solutions)</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>1.02; Water=1</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>8.50 lb./gal.</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Non viscous</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Volutility

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Flammability

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>&gt; 200 °F (&gt; 93.333 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEL</td>
<td>No data available</td>
</tr>
<tr>
<td>LEL</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Flammability (solid, gas) | Data lacking.
---|---
Environmental
Octanol/Water Partition coefficient | No data available

### Section 10: Stability and Reactivity

**Reactivity**
- Non-reactive under normal handling and storage conditions.

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

**Possibility of hazardous reactions**
- Hazardous polymerization will not occur.

**Conditions to avoid**
- Heat, sparks, open flame. Excessive heat >130°F.

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

**Hazardous decomposition products**
- Decomposition products can include and are not limited to: Carbon oxides, nitrogen oxides, ammonia and halogenated compounds.

### Section 11 - Toxicological Information

**Information on toxicological effects**

<table>
<thead>
<tr>
<th>CAS</th>
<th>Image Herbicide for St. Augustinegrass &amp; Centipedegrass Ready-To-Spray</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td>Acute Toxicity: Ingestion/Oral-Rat LD50 • &gt;2000 mg/kg; Inhalation-Rat LC50 • &gt;4.44 mg/L; Skin-Rat LD50 • &gt;2000 mg/kg; Irritation: Eye-Rabbit • Essentially non-irritating; Skin-Rabbit • Essentially non-irritating</td>
</tr>
</tbody>
</table>

**GHS Properties**

<table>
<thead>
<tr>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitization</td>
</tr>
<tr>
<td>Serious eye damage/Irritation</td>
</tr>
<tr>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
</tr>
<tr>
<td>Carcinogenicity</td>
</tr>
<tr>
<td>Skin corrosion/Irritation</td>
</tr>
<tr>
<td>Skin sensitization</td>
</tr>
<tr>
<td>STOT-RE</td>
</tr>
<tr>
<td>STOT-SE</td>
</tr>
<tr>
<td>Toxicity for Reproduction</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
</tr>
</tbody>
</table>
**Route(s) of entry/exposure**
- Inhalation, Skin, Eye, Ingestion.

**Potential Health Effects**

**Inhalation**
- **Acute (Immediate)**: Harmful if inhaled.
- **Chronic (Delayed)**: No data available.

**Skin**
- **Acute (Immediate)**: Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**: No data available.

**Eye**
- **Acute (Immediate)**: Under normal conditions of use, no health effects are expected.
- **Chronic (Delayed)**: No data available.

**Ingestion**
- **Acute (Immediate)**: May be harmful.
- **Chronic (Delayed)**: Cardiotoxicity in long term study with high doses (dogs).

**Mutagenic Effects**
- No data available.

**Carcinogenic Effects**
- Not likely to cause cancer in humans. None observed (male Sprague-Dawley rats, F-344 rats or mice).

**Reproductive Effects**
- No data available.

### Section 12 - Ecological Information

#### Toxicity

<table>
<thead>
<tr>
<th>CAS</th>
<th>Aquatic Toxicity-Fish: 96 Hour(s) LC50 Rainbow Trout 4.5 ppm [Acute] Comments: Atrazine</th>
<th>Aquatic Toxicity-Crustacea: 48 Hour(s) LC50 Daphnia magna 6.9 ppm [Acute] Comments: Atrazine</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td>96 Hour(s) LC50 Bluegill 54.5 ppm [Acute] Comments: Atrazine</td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- Atrazine: not persistent in soil.

**Bioaccumulative potential**
- Atrazine: low bioaccumulation potential.

**Mobility in Soil**
- Atrazine: Highly mobile in soil. Will leach. Sinks in water (after 24 hr.).

**Other adverse effects**
- This pesticide is toxic to aquatic invertebrates.

### 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.

**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>DOT</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></td>
<td>Not Applicable</td>
<td>Not Regulated</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (Atrazine)</td>
<td>9</td>
<td>III</td>
<td>Marine Pollutant</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>UN3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (Atrazine)</td>
<td>9</td>
<td>III</td>
<td>Acute Aquatic Toxicity</td>
</tr>
</tbody>
</table>

Special precautions for user
- No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- No data available

Other information
- DOT: Not regulated.
- 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, SARA Title III Section 313

FIFRA – Pesticide Labeling

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Precautionary Statements - KEEP OUT OF THE REACH OF CHILDREN.

Hazards to Humans and Domestic Animals • CAUTION: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing.

IF SWALLOWED • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person. IF IN EYES: • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. IF ON SKIN OR CLOTHING: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes • Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: There is no specific antidote for Atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered.

Environmental Hazards • Atrazine can travel (seep or leach) through soil and can enter groundwater which may be used as drinking water. Atrazine has been found in groundwater. Users are advised not to apply atrazine to Sand and Loamy sand soils where the water table (groundwater) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the
type of soil in your area and the location of groundwater. This pesticide is toxic to aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

<table>
<thead>
<tr>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>Atrazine</td>
</tr>
</tbody>
</table>

**United States**

**Environment**

- U.S. - CERCLA/SARA - Section 313 - Emission Reporting
  - Atrazine 1912-24-9 1.0 % de minimis concentration

**Section 16 - Other Information**

- Revision Date: 01/September/2015
- Last Revision Date: 01/September/2015
- Preparation Date: 01/September/2015
- Disclaimer/Statement of Liability: The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.