Material Safety Data Sheet

United Phosphorus, Inc.

<table>
<thead>
<tr>
<th>NFPA</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Issued Date 19-Nov-2007  
Revision Date 30-Jul-2008  
Revision Number: 1

12U-173 - ImiGold 0.5 G Turf & Ornamental Insecticide

1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Company Information</th>
<th>Contact Information</th>
<th>Phone Number</th>
<th>Available Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPI</td>
<td>Customer Service</td>
<td>1-800-438-6071</td>
<td>8:00 am - 5:00 pm (EST)</td>
</tr>
<tr>
<td></td>
<td>R&amp;D Technical Service</td>
<td>610-878-6100</td>
<td>8:00 am to 5:00 pm EST</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887</td>
</tr>
<tr>
<td>Medical: Rocky Mountain Poison Control Center (888) 673-6871 (24hrs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ImiGold 0.5 G Turf &amp; Ornamental Insecticide</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EPA Reg #</th>
</tr>
</thead>
<tbody>
<tr>
<td>70506-142</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommended Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>insecticide</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>12U-173</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

Emergency Overview  
May cause eye and skin irritation

CAUTION  
Appearance Grey.  
Physical State Granular.  
Odor No characteristic odor.

Potential Health Effects  
Eyes  
Inhalation  
Contact with eyes may cause irritation.  
May cause irritation of respiratory tract.

3. COMPOSITION INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients Name</th>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>OSHA PEL</th>
</tr>
</thead>
</table>

file://H:\tall.htm  
1/27/2009
<table>
<thead>
<tr>
<th>Montmorillonite clay</th>
<th>1302-78-9</th>
<th>96.79</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imidacloprid</td>
<td>138261-41-3</td>
<td>0.50</td>
<td>N/A</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

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

Skin Contact
Rinse skin immediately with plenty of water for 15-20 minutes. If symptoms persist, call a physician.

Inhalation
Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration. Call a physician or Poison Control Centre immediately.

Ingestion
Call a physician or Poison Control Center immediately. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person.

Notes to Physician
Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Autoignition Temperature</th>
<th>Flammability Limits in Air</th>
<th>Extinguishing Media</th>
<th>Fire/Explosion Hazard</th>
<th>Hazardous Combustion Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not available</td>
<td>Not available</td>
<td>Dry chemical Carbon dioxide (CO2) Foam Water</td>
<td>Dust explosion characteristics vary with the particle size, particle shape, moisture content, contaminants, and other variables.</td>
<td></td>
</tr>
<tr>
<td>Carbon monoxide, Carbon dioxide (CO2), Nitrous oxides, Hydrogen chloride, hydrogen cyanide.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NFPA
Health 1 Flammability 0 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Avoid contact with the skin and the eyes. Use personal protective equipment. Avoid dust formation.

Environmental Precautions
Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Methods for Clean-up
Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

file://H:\tall.htm
Handling
Avoid dust formation. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep in a well-ventilated place.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

8. EXPOSITION CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Controls
Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal Protective Equipment
Eye/face Protection
Where there is potential for eye contact have eye flushing equipment available. Avoid contact with eyes.
Skin Protection
Wear protective gloves/clothing.
Respiratory Protection
Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replace need for face shield and/or chemical goggles. If exposure cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General Hygiene Considerations
Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Grey</td>
<td></td>
</tr>
<tr>
<td>Physical State</td>
<td>Granular</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Percent Volatiles</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No characteristic odor</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>(20°C) 7.13</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Range</td>
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<td></td>
</tr>
<tr>
<td>Solubility</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
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<td></td>
</tr>
<tr>
<td>VOC Content</td>
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<td></td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Percent Solids</td>
<td>Not available</td>
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</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable under recommended storage conditions

Conditions to Avoid
Excessive heat and open flame.

Incompatible Materials
No materials to be especially mentioned

Hazardous Decomposition Products
Carbon dioxide (CO2), Carbon monoxide, hydrogen cyanide, Hydrogen chloride, Nitrogen oxides (NOx).

Possibility of Hazardous Polymerization
Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information
Imi 0.5
Acute oral LD50 = 5,000 mg/kg

file://H:\tall.htm 1/27/2009
Acute dermal LD50 = >2,000 mg/kg
Acute inhalation LC50 = >4,905 mg/L (4 hr)
Eye irritation = Mild eye irritant
Skin irritation = Not an irritant
Sensitization = Not a skin sensitizer

Chronic Toxicity

Imidacloprid (A.I.) was not considered carcinogenic in rats or mice in oncogenicity studies. Reproduction studies indicated that Imidacloprid is not a reproductive toxicant. Mutagenicity studies noted no mutagenic or genotoxic effects in in vitro and in vivo tests.

Carcinogenicity

Developmental effects were observed at doses that caused material toxicity in rats and rabbits. It is not considered a primary developmental toxicant.

Imidacloprid neurotoxicity tests showed slight behavioral and activity changes only at the highest dose in rats. Neural tissues showed no correlating morphological changes.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to bees.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated Packaging
Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT
Not regulated

ICAO
Not regulated

IATA
Not regulated

IMDG/IMO
Not regulated

15. REGULATORY INFORMATION

International Inventories

Montmorillonite clay
  DSL Listed
  EINECS/ELINCS Listed
  CHINA Listed
  KECL Listed
  Imidacloprid CHINA Listed

USA

Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.
SARA 311/312 Hazardous Categorization
- Chronic Health Hazard: No
- Acute Health Hazard: Yes
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any HAPs.

CERCLA
RCRA
Pesticide Information

State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

State Right-to-Know
International Regulations
Mexico - Grade: Not available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Not determined

16. OTHER INFORMATION

Revision Date: 30-Jul-2008

Revision Summary
Correct spelling error(s)

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End of MSDS