Material Safety Data Sheet

Propizol
Fungicide

Date of Issue: June 2014
Product No. 1 Liter 040-6300 1 Gallon 040-6302

Arborjet, Inc.
99 Blueberry Hill Rd
Woburn, MA 01801
In Case of Emergency, ChemTel 1-800-255-3924
Product information: 1-781-935-9070

Section 1: Product Identification

Product Trade Name: Propizol
EPA Signal Word: Warning
Active Ingredient (% w/w): Propiconazole (14.3%)
Chemical Name: 1-[[2-(2, 4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl](methyl)-1 H-1,2,4-triazole
Chemical Class: Triazole Derivative Fungicide
EPA Registration Number: 74578-8

Section 2: Hazards Identification

Health and Environmental: Harmful if inhaled. May be harmful if swallowed or in contact with skin. Irritating to eyes. Vapors may cause drowsiness and dizziness. May be harmful if swallowed and enters airway.

Combustible liquid.

Hazardous Decomposition Products: None known.

Physical Properties:
- Appearance: Yellow to orange clear liquid
- Odor: Aromatic solvent

Unusual Fire, Explosion, and Reactivity Hazards: Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Material</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other</th>
<th>NTP / IARC / OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrahydrofururyl Alcohol</td>
<td>Not</td>
<td>Not</td>
<td>0.5 ppm</td>
<td>TWA</td>
</tr>
<tr>
<td>Propiconazole (14.3%)</td>
<td>Not</td>
<td>Not</td>
<td>8</td>
<td>No</td>
</tr>
</tbody>
</table>

*** Syngenta Occupational Exposure Limit (OEL)
**** Recommended by AIHA (American Industrial Hygiene Association)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

Syngenta Hazard: B, S

Section 4: First Aid Measures

Have the product container, label or Material Safety Data Sheet with you when calling ChemTel (800-255-3924), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call ChemTel (800-255-3924), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-255-3924 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: 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 ChemTel (800-255-3924), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call ChemTel (800-255-3924), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, calling 311 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call ChemTel (800-255-3924), a poison control center or doctor for further treatment advice.

Notes to Physician:
There is no specific antidote if this product is ingested. Treat symptomatically.
Contains petroleum distillate — vomiting may cause aspiration pneumonia.

Medical Conditions Likely to be Aggravated by Exposure: None known.

Section 5: Fire Fighting Measures

Fire and Explosion:
- Flash Point (Test Method): 181° (Setaphash)
- Flammable Limits (% in air): Lower: NA  Upper: NA
- Autoignition Temperature: NA
- Flammability: Combustible liquid

Unusual Fire, Explosion, and Reactivity Hazards: Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire: Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from area to prevent human exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight, dike and collect runoff.

Section 6: Accidental Release Measures

In Case of Spill or Leak: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

Section 7: Handling and Storage

Store material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages, or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for...
exposure to the material. Wash thoroughly with soap and water after handling.

**Section 8: Exposure Controls/Personal Protection**

For commercial and/or farm applications: User must read and observe all precautions on the product label.

Eye Protection: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear. Splash goggles are recommended. Applicators should have an eyewash bottle available while injecting. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Skin Protection: Avoid prolonged or frequent skin contact with this material. Skin contact can be minimized by wearing protective gloves. Chemically resistant gloves should be worn at all times when handling this material. Wear long sleeve shirt, long pants, shoes plus socks, as well as, chemical resistant gloves, such as polyethylene, butyl rubber, neoprene rubber or viton.

Respiratory Protection: No special respiratory protection is required. However, maintain good ventilation when using material.

Ingestion Protection: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash hands with soap and water thoroughly after use to prevent possible ingestion of this product.

**Section 9: Physical and Chemical Properties**

Appearance: Yellow to orange clear liquid
Odor: Aromatic solvent
Melting Point: NA
Boiling Point: 331°F (166°C)
Specific Gravity: 1.09 g/cc @ 68°F (20°C); 9.09 lb/gal @ 68°F (20°C)
PH: 6 – 8 (1% solution in H2O)
Solubility in H2O: Propiconazole: 0.1 g/l @ 68°F (20°C)
Vapor Pressure: Propiconazole: 4.2 x 10(-7) mmHg @ 77°F (25°C)

**Section 10: Stability and Reactivity**

Stability: Stable under normal use and storage conditions.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Flame, heat, ignition sources.
Materials to Avoid: Strong oxidizers.
Hazardous Decomposition Products: None known.

**Section 11: Toxicology Information**

Acute Toxicity/ Irritation Studies (Finished Product):

Ingestion: Oral (LD50 Female Rat): 4340 mg/kg body weight
Dermal: Dermal (LD50 Rat): >2020 mg/kg body weight
Inhalation: Inhalation (LC50 Rat): >2.6 mg/l air – 4 hours
Eye Contact: Moderately Irritation (Rabbit)
Skin Contact: Non-Irritating (Rabbit)
Skin sensitzation: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects: Propiconazole: None observed.

Chronic/Sub-chronic Toxicity Studies: Propiconazole: None observed.

Carcinogenicity: Propiconazole: Increased incidence of liver tumors at extremely high doses (male mice).

Other Toxicity Information: Propiconazole: None observed.

Toxicity of Other Components:
Tetrahydrofurfuryl Alcohol (THFA)
Inhalation of vapors at high concentrations can cause central nervous system effects (dizziness, headache), irritation to eyes or respiratory tract. Chronic overexposure may affect the kidney.

**Target Organs**

**Active Ingredients** Propiconazole: Liver

**Inert Ingredients** Tetrahydrofurfuryl Alcohol (THFA): CNS, Kidney

**Section 12: Ecological Information**

Ecotoxicity Effects:
Propiconazole:
Fish (Rainbow Trout) 96-hour LC50 0.83 ppm
Invertebrate (Water Flea) 48-hour EC50 3.2 ppm
Green Algae 9-day EC50 0.72 ppm
Bird (Mallard Duck) 14-day LD50 2510 mg/kg

Environmental Fate
Propiconazole:

**Section 13: Disposal Considerations**

Disposal: Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable.
Listed Waste: Not Applicable

**Section 14: Transport Information**

DOT Classification
Ground Transport – NAFTA
Not regulated
Bulk (>119 gallons)
Proper Shipping Name: Combustible Liquid, N.O.S. (Tetrahydrofurfuryl Alcohol)
Hazard Class: Combustible Liquid
Identification Number: NA 1993
Packing Group: PG III

Comments
Water Transport – International
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole), Marine Pollutant
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

Air Transport
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Propiconazole)
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

**Section 15: Regulatory Information**

EPCRA SARA Title III Classification:
Section 311/312 Hazard Classes: Acute Health Hazard, Fire Hazard
Section 313 Toxic Chemicals: Propiconazole (14.3%) (CAS No. 60207-90-1)

California Proposition 65
This product does not contain chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

CERCLA/SARA 304 Reportable Quantity (RQ): None

RCRA Hazardous Waste Classification (40 CFR 261): Not Applicable

TSCA Status: Exempt from TSCA, subject to FIFRA

Section 16: Other Information

<table>
<thead>
<tr>
<th>NFPA Hazard Ratings</th>
<th>HMIS Hazard Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health: 2</td>
<td>Health: 2</td>
</tr>
<tr>
<td>Flammability: 2</td>
<td>Flammability: 2</td>
</tr>
<tr>
<td>Instability: 0</td>
<td>Instability: 0</td>
</tr>
<tr>
<td>0 Minimal</td>
<td>0 Minimal</td>
</tr>
<tr>
<td>1 Slight</td>
<td>1 Slight</td>
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<tr>
<td>2 Moderate</td>
<td>2 Moderate</td>
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<tr>
<td>3 Serious</td>
<td>3 Serious</td>
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<tr>
<td>4 Extreme</td>
<td>4 Extreme</td>
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</tbody>
</table>

For any non-emergency questions about this product call: 1-781-935-9070

Original Issued Date: June 2014

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, either expressed or implied, is made with respect to the information contained herein.