1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Willowood Pronamide 3.3SC
CHEMICAL FAMILY: Benzamide
EPA REG. NO. 87290-22

COMPANY IDENTIFICATION:
Willowood, LLC
1600 NW Garden Valley Blvd., Suite 120
Roseburg, Oregon 97471
Tel: 877-679-9963

2. COMPOSITION, INFORMATION OF INGREDIENTS:

<table>
<thead>
<tr>
<th>Components</th>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>EINECS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pronamide</td>
<td>23950-58-5</td>
<td>245-951-4</td>
<td>35.6</td>
</tr>
<tr>
<td></td>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>310-194-1</td>
<td>&gt; 1.4</td>
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<tr>
<td></td>
<td>Titanium oxide</td>
<td>13463-67-7</td>
<td>&gt; 1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Silica crystalline</td>
<td>14808-60-7</td>
<td>&gt; 0.4</td>
<td></td>
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<tr>
<td></td>
<td>Inert ingredients</td>
<td>NE</td>
<td>NE</td>
<td>Balance</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION SUMMARY:

NOTE: Please refer to Section 11 for detailed toxicological information.

EMERGENCY OVERVIEW: CAUTION! This product is an irritant and an environmentally hazardous substance.

The product may cause eye and skin irritation. This herbicide is moderately toxic to aquatic organisms.

POTENTIAL HEALTH EFFECTS:

ROUTES OF ENTRY: Eye and skin contact.

INHALATION: Overexposure to the mist may cause upper respiratory irritation, headache, dizziness, nausea, vomiting and cramps.

SKIN CONTACT: Prolonged exposure may cause redness to the skin.

EYE CONTACT: Mist may cause irritation to the eyes.

INGESTION: Very low toxicity, expect very little problem.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: May cause upper respiratory irritation, dermatitis to the skin and sensitive eyes.
CARCINOGENICITY: Crystalline silica may cause cancer and pronamide has caused cancer in animal studies.

4. FIRST AID MEASURES:

INHALATION: Move the exposed person to fresh air free from risk of further exposure. If the person is not breathing call 9-1-1, then apply rescue breathing. Seek medical attention as soon as possible.

EYE CONTACT: Flush with clean, lukewarm water raising upper and lower eyelids at low pressure for 15 minutes. Remove contact lenses, if present, after the first five minutes and continue to rinse the eyes. Call poison control center or doctor for treatment advice.

SKIN CONTACT: Rinse area with clean water for 15-20 minutes. Call poison control center or doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. DO NOT INDUCE VOMITING. Lower the head when the exposed person is vomiting to minimize entry into the throat and lungs.

NOTES TO PHYSICIAN TREATMENT: There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient’s condition is recommended.

5. FIRE FIGHTING MEASURES:

FLASHPOINT AND METHOD: Not flammable

FLAMMABLE LIMITS: NE

EXTINGUISHING METHOD: Use dry chemicals, carbon dioxide and water spray.

FIRE OR EXPLOSION HAZARDS: This material under complete combustion will form oxides of carbon and nitrogen, possibly hydrogen chloride.

SPECIAL FIREFIGHTING PROCEDURES: Keep upwind of fire. Firefighters - Use full emergency equipment with self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES: Wear PPE. Avoid creating mist and then breathing the mist. Isolate the area and prevent material from getting into waterways.

Absorb the material with inert material such as “kitty litter”. Sweep up and place the collected material in a closed container.

Finish cleaning the area using small amounts of soap and water on the spill area.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE: Keep containers tightly closed. Store in a cool, well-ventilated area.

SPECIAL SENSITIVITY: Avoid contact with skin and eyes, Wear PPE per Section 8.

HANDLING AND STORAGE PRECAUTIONS: Avoid breathing any of the mist. Use normal safety procedures and good personal hygiene. Wash thoroughly after use and before eating, drinking, chewing gum, or using tobacco.
8. EXPOSURE CONTROLS, PERSONAL PROTECTION:

**EYE PROTECTION:** Use safety glasses or goggles. There is potential for mist exposure to cause injury to the eyes.

**SKIN PROTECTION:** Wear chemically resistant gloves (Nitrile.) Wear long sleeved shirts, long pants, and shoes and socks.

**RESPIRATORY PROTECTION:** Wear a respirator if the airborne conditions result in a mist forming.

**OCCUPATIONAL EXPOSURE LIMITS:** Silica total dust - 15 mg/m$^3$; titanium dioxide - 10 mg/m$^3$.

**ENGINEERING CONTROLS:** Provide adequate ventilation in areas where the product is used

9. PHYSICAL AND CHEMICAL PROPERTIES:

**PHYSICAL FORM:** Liquid.

**COLOR:** Off-white

**ODOR:** Slight odor.

**pH:** NA

**SOLUBILITY IN WATER:** Emulsifies.

**SPECIFIC GRAVITY (water=1):** 1.13 @ 68 °F (20 °C)

10. STABILITY AND REACTIVITY:

**STABILITY:** This product is stable material under normal conditions of storage and handling.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBLES:** None known.

**DECOMPOSITION PRODUCTS:** Product will burn and the products of complete combustion are oxides of carbon and nitrogen. Thermal decomposition may form hydrogen chloride.

11. TOXICOLOGICAL INFORMATION:

The significant routes of exposure are eyes and skin.

Oral LD$_{50}$(rat) = 52,000 mg/kg  Dermal LD$_{50}$(rat) = 2,000 mg/kg  LC$_{50}$(rat) = 5.0 mg/L (4-hr test no deaths)

12. ECOLOGICAL INFORMATION:

Product is toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS:

**WASTE DISPOSAL METHOD:** This material is a liquid, wear a mist respirator and other required PPE to dispose of the material according to label instructions for pesticide and container disposal. Dispose of according to the regulations of local, state, and federal regulatory agencies.
14. TRANSPORT INFORMATION:


IATA (air) SHIPPING NAME: Not regulated by air.

IMO (water) SHIPPING NAME:  
UN-Number 3082, Environmentally hazardous substance, Liquid, N.O.S., (Pronamide), DG Class 9, Packing Group III, Marine Pollutant

15. REGULATORY INFORMATION:

OSHA STATUS: Pronamide.

TSCA STATUS: Not listed.

CERCLA REPORTABLE QUANTITY: Pronamide (CAS # 23950-58-5), 5000 pounds

CALIFORNIA PROPOSITION 65: Pronamide and crystalline silica are known to the State of California to cause cancer.

RCRA STATUS: U193 for pronamide.

SARA 311/312 HAZARD NOTIFICATION/REPORTING

IMMEDIATE: Y       FIRE: N       SUDDEN RELEASE OF PRESSURE: N

DELAYED: Y       REACTIVE: N

SARA TITLE III: None.

SECTION 302 EXTREMELY HAZARDOUS: None.

SECTION 313 TOXIC CHEMICALS: Pronamide.

RIGHT TO KNOW: Pronamide and kaolin are listed in New Jersey and Pennsylvania.

16. OTHER INFORMATION:

National Fire Protection Association (NFPA)

Hazardous Materials Identification System (HMIS)

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
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<tbody>
<tr>
<td>0</td>
<td>Least</td>
</tr>
<tr>
<td>2</td>
<td>Health 1 Slight 2 Health</td>
</tr>
<tr>
<td>0</td>
<td>Flammability 2 Moderate 0 Flammability</td>
</tr>
<tr>
<td>0</td>
<td>Instability 3 High 0 Reactivity</td>
</tr>
<tr>
<td>4</td>
<td>Severe H PPE</td>
</tr>
</tbody>
</table>
**RISK PHRASES:** R21, Harmful in contact with skin; R36, Irritating to eyes; R45, May cause cancer, and R51, Toxic to aquatic organisms.

**SAFETY PHRASES:** S2, Keep out of reach of children; S9, Keep container in a well-ventilated place; S25, Avoid contact with eye; S36, Wear suitable protective clothing; S37, Wear suitable gloves; S38, In case of insufficient ventilation, wear suitable respiratory equipment; S39, Wear eye/face protection; S61, Avoid release to the environment; and S62, If swallowed, do not induce

**REASON FOR ISSUE:** New International ANSI Z400 format.

**APPROVAL DATE:** 06/24/2011

**PREPARED BY:** Dennis Belau          **REVIEWED BY:** Joe Middione & Jack Firkins

_DBelau@comcast.net_

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AICS</td>
<td>Australian Inventory of Chemical Substances</td>
</tr>
<tr>
<td>CAS#</td>
<td>Chemical Abstract Service Number</td>
</tr>
<tr>
<td>°C</td>
<td>Celsius temperature scale</td>
</tr>
<tr>
<td>CI</td>
<td>China</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada Domestic Substances List</td>
</tr>
<tr>
<td>ECL</td>
<td>Korean Existing Chemicals List</td>
</tr>
<tr>
<td>EEC</td>
<td>European Economic Commission</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japanese existing Chemical List</td>
</tr>
<tr>
<td>EINECS #</td>
<td>European Inventory of Existing Chemical Substance Number</td>
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<tr>
<td>EU</td>
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</tr>
<tr>
<td>(Israel)</td>
<td>2001 proposed list of chemical substances to be regulated under Israel Hazardous Substances Law and Regulations List of 1993</td>
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<tr>
<td>MAC</td>
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</tr>
<tr>
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<td>Germany</td>
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<td>MITI</td>
<td>Ministry of International Trade and Inmstry</td>
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<tr>
<td>NA</td>
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<td>PICCS</td>
<td>Philippines</td>
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