MATERIAL SAFETY DATA SHEET

PHM Wood Finishes Group
3194 Hickory Boulevard
Henderson, North Carolina 28638
828-728-8266

EMERGENCY PHONE (CHEMTREC): 1-800-424-9300
FOR ALL INTERNATIONAL TRANSPORTATION ACCIDENTS: 1-703-577-3887 (collect)

Health: 2 Flammability: 3 Reactivity: 6

PRODUCT NAME: Ref1-0888 Woodturner's Finish

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

REVISED DATE: 07/2006
SUBLASHER: 2005:09
MSDS NO: 0611-0888

II. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>%</th>
<th>CAS #</th>
<th>PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>9</td>
<td>141-78-5</td>
<td>400 ppm TWA; 1400 mg/m3 TWA</td>
</tr>
<tr>
<td>methanol</td>
<td>9</td>
<td>64-17-5</td>
<td>1000 ppm TWA; 1000 mg/m3 TWA</td>
</tr>
<tr>
<td>isopropyl alcohol</td>
<td>11</td>
<td>67-63-0</td>
<td>No PEL established</td>
</tr>
<tr>
<td>methoxyethanol</td>
<td>11</td>
<td>9000-59-3</td>
<td>200 ppm TWA; 760 mg/m3 TWA</td>
</tr>
<tr>
<td>n-propyl acetate</td>
<td>11</td>
<td>106-42-3</td>
<td>No PEL established</td>
</tr>
<tr>
<td>tert-butanol</td>
<td>11</td>
<td>109-50-0</td>
<td>200 ppm TWA; 840 mg/m3 TWA</td>
</tr>
<tr>
<td>butanol</td>
<td>11</td>
<td>68056-56-9</td>
<td>No PEL established</td>
</tr>
</tbody>
</table>

III. HAZARDS IDENTIFICATION

Routes of Entry: Inhalation, ingestion, skin, eyes, Inhalation and skin.
Medical Conditions Aggravated: Skin disease including dermatitis and sensitization, Respiratory disease including asthma and bronchitis, Eye disease, Liver disease, Digestive tract disease

Immediate (Acute) Health Effects
Inhalation: Inhalation may be delayed for several hours. Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

Skin Contact: Can cause minor skin irritation, itching, and dermatitis.
**Eye Contact:**
Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.

**Skin Absorption:**
Contains methanol. Upon prolonged or repeated exposure, may cause deterioration of the optic nerve if large quantities are absorbed through the skin. Repeated absorption of large quantities may lead to blindness. No absorption hazard in normal industrial use.

**Ingestion:**
Harmful if swallowed. Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.

**Target Organ Acute Toxicity:**
- **Ethyl acetate:** eyes, skin, respiratory system
- **Ethyl alcohol:** respiratory system, skin, eyes, CNS, liver, blood, reproductive system
- **Methyl alcohol:** skin, eyes, CNS, GI tract, respiratory system
- **n-Propyl acetate:** skin, eyes, CNS, respiratory system
- **Isopropyl alcohol:** eyes, skin, respiratory system

**Long-Term (Chronic) Health Effects:**

**Carcinogenicity:**
None of the substances have been shown to cause cancer in long term animal studies. Not a carcinogen according to NTP, IARC, or OSHA.

**Mutagenicity:**
No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

**Inhalation:**
Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

**Skin Contact:**
Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Upon prolonged or repeated contact, can cause minor skin irritation, defatting, and dermatitis.

**Eye Contact:**
Upon prolonged or repeated contact, can cause moderate to severe eye injury. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.

**Skin Absorption:**
Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage.

**Target Organ Chronic Toxicity:**
Skin, Skin, Eyes, Nervous System, Respiratory Tract, Blood, Liver, Digestive Tract.

**Supplemental Health Hazard Information:**
No additional health information available.
IV. FIRST AID

**Inhalation:**
If symptoms are experienced, remove source of contamination or move victim to fresh air and obtain medical advice. Remove to fresh air. Get medical attention immediately. Have a trained individual administer humidified oxygen. If not breathing, give artificial respiration. Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

**Eyes:**
Flush eyes with plenty of water for at least 20 minutes; retract eyelids often. Til the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

**Skin Contact:**
Wash with mild soap and water. If irritation occurs get medical attention. If clothing is contaminated, remove and wash before reuse. Wash with soap and water. Get medical attention if irritation develops or persists.

**Ingestion:**
Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS. Aspiration hazard! DO NOT induce vomiting. Seek immediate medical attention.

**Notes to MDO:**
Aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity.

V. FIRE FIGHTING MEASURES

**Flammability Summary:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>24 (CALC.) °F</td>
</tr>
<tr>
<td>Upper Flammable/Explosive Limit, % in air</td>
<td>10 % 77°F</td>
</tr>
<tr>
<td>Lower Flammable/Explosive Limit, % in air</td>
<td>2.0 % 77°F</td>
</tr>
</tbody>
</table>

**Fire Hazards:**
Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressure, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death. Container may explode with heat of fire. Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back.

**Extinguishing Media:**
Use water, CO2, dry chemical, foam. Carbon dioxide Flammable component(s) of this material may be lighter than air and burn while floating on the surface. Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and trap exposed material from being damaged by fire.
Fire Fighting Instructions: Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Water spray may be used to cool containers however be careful not to spread the fire with the water used for cooling purposes. Use methods for the surrounding fire. Do not enter fire area without proper protection including self-contained positive breathing apparatus and full protective equipment. Fight fire from a safe distance and protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray fog for cooling.

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide, carbon monoxide, various hydrocarbons.

VI. ACCIDENTAL RELEASE MEASURES

Health Consideration for Spill Response: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including: the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Spill Mitigation Procedures General Methods: Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

VII. HANDLING AND STORAGE

Handling: Use spark-proof tools and explosion-proof equipment. Wash thoroughly after handling. Avoid contact with material. Ground and bond containers when transferring material. Keep in air-tight containers—material is hygroscopic. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse. Harmful or irritating material. Avoid contact and avoid breathing the material. Use only in a well ventilated area.

Storage: Keep away from sources of ignition. Do not store near combustible materials. Keep container closed when not in use. Keep away from heat, sparks, and flame. Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed.

VIII. ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: Facilities storing or using this material should be equipped with an eyewash and safety shower. Additional area ventilation or local exhaust may be required to maintain air concentrations below recommended exposure limits. Explosion proof exhaust ventilation should be used. No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.
Protective Equipment
Respiratory Tract: Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessment, maintenance, inspection, cleaning, and convenient sanitary storage should be implemented.

Eyes: Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.

Skin: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

IX. PHYSICAL DATA
Physical State: COLORLESS LIQUID
Odor: STRONG SOLVENT

Sat'd Sol. Vol %: 15.51
Sat'd Sol. Wt %: 20.923

Material VOC g/m3: 5.922
Material VOC g/mL: 712.40
Coatings VOC g/m3: 5.922
Coatings VOC g/mL: 712.40

Weight per gallon: 7.4876

X. STABILITY AND REACTIVITY
Stability Information: Stable. Stable under normal conditions.

Conditions to Avoid: Avoid heat, sparks. Flame and oxidizing agents. None known.


Hazardous Polymerization: Hazardous polymerization will not occur.

XI. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>LD50/IC50</th>
<th>Inhalation LD50 Rat.: 200 ppm/hr; LD50 Mouse.: 25 ppm/hr; Inhalation LC50 Mouse.: 45 ppm/hr; Oral LD50 Rat.: 5600 mg/kg; Oral LD50 Mouse.: 4100 mg/kg; Formal LD50 Rat.: 100 ml/kg, Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td></td>
<td>Intracutaneous LD50 Rat.: 20000 ppm/hr; Intracutaneous LC50 Mouse.: 25 ppm/hr; Oral LD50 Rat.: 2000 mg/kg; Oral LD50 Mouse.: 340 mg/kg; Inhalation LD50 Rat.: 60000 ppm/hr; Oral LD50 Rat.: 1500 mg/kg; Oral LD50 Mouse.: 7300 mg/kg; Formal LD50 Rat.: 1500 mg/kg;</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td></td>
<td>Intracutaneous LD50 Rat.: 9370 mg/kg; Oral LD50 Mouse.: 8000 mg/kg; Oral LD50 Rat.: 1500 mg/kg;</td>
</tr>
<tr>
<td>Acetic acid, propyl ether</td>
<td>110-86-4</td>
<td></td>
<td>Intracutaneous LD50 Rat.: 100 ppm/hr; Oral LD50 Rat.: 5.45 mg/kg; Oral LD50 Mouse.: 5600 mg/kg; Dermal LD50 Rat.: 12000 mg/kg;</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td></td>
<td>Intracutaneous LD50 Rat.: 160 ppm/hr; Oral LD50 Rat.: 5.34 mg/kg; Oral LD50 Mouse.: 5600 mg/kg; Dermal LD50 Rat.: 12000 mg/kg;</td>
</tr>
</tbody>
</table>
XIII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product: The waste may be a listed hazardous waste. Spent or discarded material is a hazardous waste.

Disposal Methods: Comply with all local, state, federal, and provincial environmental regulations. Dispose of by incineration following federal, state, local, or provincial regulations.

Potential EPA Waste Codes: In discarded, this product is considered a RID ignitable waste. (RID).

Components Subject to USEPA and Disposal Restrictions:

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDT</td>
<td>51-22-0</td>
<td>37.87</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>55.1</td>
</tr>
</tbody>
</table>

XIV. TRANSPORTATION INFORMATION

DGT: Paint, 3, UN 1263, II


XV. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Regulation</th>
<th>CASRN</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>SARA 313 Reportable</td>
<td>67-56-1</td>
<td>55.1</td>
</tr>
<tr>
<td>Ironpentyl alcohol</td>
<td>SARA 313 Reportable</td>
<td>67-92-6</td>
<td>5.56</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>California Proposition 65</td>
<td>64-17-5</td>
<td>31.26</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>New Jersey Right To Know</td>
<td>141-78-6</td>
<td>37.87</td>
</tr>
<tr>
<td>Ethanol</td>
<td>New Jersey Right To Know</td>
<td>64-17-5</td>
<td>31.26</td>
</tr>
<tr>
<td>Natural Resin</td>
<td>New Jersey Right To Know</td>
<td>6000-50-3</td>
<td>16.3</td>
</tr>
<tr>
<td>Isobutene</td>
<td>New Jersey Right To Know</td>
<td>6000-56-3</td>
<td>9.51</td>
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<tr>
<td>Methanol</td>
<td>New Jersey Right To Know</td>
<td>67-56-1</td>
<td>5.51</td>
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<tr>
<td>Hydrocarbon mixture</td>
<td>New Jersey Right To Know</td>
<td>8042-47-5</td>
<td>2.26</td>
</tr>
</tbody>
</table>

XVI. ADDITIONAL INFORMATION

Other Information: IMPORTANT: WHILE THE DESCRIPTIONS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY, BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION USE, WE RECOMMEND THAT YOU PERFORM AN ASSESSMENT TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED. DATA OR INFORMATION SET FORTH IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION OR DATA PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, THE DESCRIPTIONS, DATA AND INFORMATION FURNISHED HEREUNDER ARE GIVEN GRATIS. NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DATA AND INFORMATION GIVEN ARE ASSUMED. ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

MSDS glossary.