MATERIAL SAFETY DATA SHEET

Manufacturer's name: WOODWRITEN LTD.
Address: 2121 Abell Lane
         Sparks, MD 21152
Telephone number: (410) 771-4444
Emergency telephone: 1-888-966-3974

HMIS Rating
  Health: 3
  Flammability: 3
  Reactivity: 1
  Personal protection: 1

Prepared by: Edward W. Underriner
Date prepared: March 4, 1997
Date revised: n/a

I - IDENTITY

Common name: WoodWrite Semi Gloss Polish (CN-16)
Proper shipping name; Hazard class; Hazard ID number; Packaging group:
Consumer commodity, Lacquer, ORM-D; None (8 oz size)
C.A.S. number: None

II - INGREDIENT INFORMATION

Principal hazardous component(s):

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>%</th>
<th>Threshold limit</th>
<th>VP (mm Hg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>16</td>
<td>TLV/PEL: 100/50ppm</td>
<td></td>
</tr>
<tr>
<td>VM&amp;P Naphtha - EC</td>
<td>64742-89-8</td>
<td>14</td>
<td>TLV/PEL: 300ppm</td>
<td>26 @ 100°F</td>
</tr>
<tr>
<td>Aliphatic hydrocarbon</td>
<td>8052-41-3</td>
<td>9</td>
<td>TLV/PEL: N.E.*</td>
<td>12 @ 100°F</td>
</tr>
<tr>
<td>* NIOSH recommends a limit of 350mg/m³, 8 hour TWA, 1800 mg/m³ as determined by a 15 minute sample.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>9</td>
<td>TLV/PEL: 750ppm</td>
<td></td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>&lt; 5</td>
<td>TLV/PEL: 100ppm</td>
<td>21 @ 100°F</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>&lt; 5</td>
<td>TLV/PEL: 200ppm</td>
<td></td>
</tr>
<tr>
<td>Isopropanol, anhydrous</td>
<td>67-63-0</td>
<td>&lt; 5</td>
<td>TLV/PEL: 400ppm</td>
<td>33 @ 68°F</td>
</tr>
<tr>
<td>Isobutyl alcohol</td>
<td>78-83-1</td>
<td>&lt; 1</td>
<td>TLV/PEL: 50ppm</td>
<td>8.8 @ 68°F</td>
</tr>
<tr>
<td>Isobutyl isobutyrate</td>
<td>97-85-8</td>
<td>&lt; 1</td>
<td>TLV/PEL: N.E.**</td>
<td>20.8 @ 129°F</td>
</tr>
<tr>
<td>** Eastman Chemical recommends exposure limit of 100ppm, 8 hr TWA.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethyl benzene</td>
<td>100-41-4</td>
<td>&lt; 1</td>
<td>TLV/PEL: 100ppm</td>
<td>7.1 @ 68°F</td>
</tr>
</tbody>
</table>

N. E. -- Not Established
III - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling range: 160 - 300°F
Specific gravity: 0.87
Vapor density: Heavier than air
Density: 7.25 lbs/gal
Liquid density: Lighter than water
Percent volatiles: By Volume: 61% By weight: 58%
Evaporation rate: 0.6 x n-Butyl Acetate
Solubility in Water: Insoluble
Appearance and odor: Opaque liquid w/ solvent odor
pH: Not applicable
Auto-ignition temperature: No information found
Decomposition temperature: No information found
Corrosion rate: No information found
Viscosity: Thin liquid to heavy viscous material

IV - FIRE AND EXPLOSION HAZARD DATA

Flammability class: IIB
Flash point: 33°F TCC
LEL: 1.00% UEL: 12.70%
Extinguishing media: Foam, CO2, Dry Chemical

Special fire fighting procedures: Full fire fighting equipment with self-contained breathing apparatus and full protective clothing should be worn by fire fighters. Water may be used to cool closed containers to prevent pressure buildup, auto ignition or explosion.

Unusual fire and explosion hazards: Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

V - HEALTH HAZARD DATA

Permissible exposure level: See II - Hazardous Ingredients, above.

Effects of overexposure:

Inhalation: Irritation of the respiratory tract and acute nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma.

Skin contact: Contact with the skin can cause irritation. Symptoms include swelling, redness and rash.

Eye contact: Liquid, aerosols or vapors are irritating and may cause tearing, redness and swelling, accompanied by a stinging sensation.

Skin absorption: Prolonged or repeated contact can cause moderate irritation, drying and defatting of the skin which can cause the skin to crack. Pre-existing skin disorders may be aggravated by exposure to this material. Skin absorption is possible and may contribute to symptoms of toxicity from other routes of exposure.

Ingestion:
Acute: Can result in irritation and possible corrosive action in the mouth, stomach tissue and digestive tract. Vomiting may cause aspiration of the solvent, resulting in chemical pneumonitis.

Health hazards (acute and chronic):
Acute: Vapors are irritating to eyes, nose and throat. Inhalation may cause headaches, difficult breathing and loss of consciousness.
Chronic: Prolonged contact will cause drying and cracking of the skin, due to defatting action. Skin sensitization, asthma or other allergic response may develop.

WoodWrite Semi Gloss Polish (CN-16)
Primary routes of entry:

Topical (Skin Contact): Yes
Ingestion (Gastro-Intestinal): No
Inhalation (Lungs): Yes

Carcinogenicity: HTP? No  IARC Monographs? No  OSHA Regulated? No

Medical conditions generally aggravated by exposure: Asthma and any other respiratory disorders. Skin allergies, eczema and dermatitis.

First aid:

Inhalation: Move to an area free from risk of further exposure. Restore breathing. Asthmatic type symptoms may develop and may be immediate or delayed by several hours. Obtain medical attention.

Skin: Remove contaminated clothing. Wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse.

Eyes: Flush with clean lukewarm water (low pressure) for at least 15 minutes, occasionally lifting eyelids. Obtain medical attention.

Ingestion: Do not induce vomiting. Do not give anything to an unconscious person. Obtain medical attention.

NOTE TO PHYSICIAN: This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 UG/DL. Methanol is effectively removed by hemodialysis.

NOTE TO PHYSICIAN: This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

NOTE TO PHYSICIAN: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmia. Sympathomimetic drugs may initiate cardiac arrhythmia in persons exposed to this material.

Effects of chronic overexposure:

This material (or a component) shortens the onset or worsens the liver and kidney damage induced by other chemicals.

Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies reveal that prolonged intentional abuse of toluene during pregnancy may cause birth defects in humans. Prolonged intentional toluene abuse may lead to brain damage characterized by disturbances in gait, personality changes and loss of memory. Comparable central nervous system effects have not been shown to result from occupational exposure to toluene.

Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. While there is sufficient evidence that methanol causes birth defects in experimental animals, the relevance of these findings to humans is uncertain because of differences in metabolism and toxicity of methanol between humans and non-primates.
Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans and may aggravate pre-existing disorders of these organs: kidney damage, cardiac sensitization, visual impairment. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: mild, reversible liver effects; effects on hearing; cardiac sensitization; visual impairment.

WARNING: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

VI - REACTIVITY DATA

Stability: [ ] Unstable [x] Stable
Hazardous polymerization: [ ] May occur [x] Will not occur
Incompatibility: Strong oxidizing agents; strong acids.
Conditions to avoid: High temperatures; sparks; open flames.
Hazardous decomposition products:
By high heat/temperature: Carbon monoxide, carbon dioxide, oxides of nitrogen.

VII - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Evacuate all non-essential personnel. Remove all sources of ignition (flame, spark sources, hot surfaces). Ventilate area. Contain and remove with inert absorbent and non-sparking tools.

Waste disposal method: Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Empty containers must be handled with care, due to product residue and flammable vapor. DO NOT incinerate closed containers. Also see Sections IV, V VI for other precautions.

EPA hazardous waste number/code: D001, F003, F005
Hazardous waste characteristics:
  Ignitability: Yes
  Corrosivity: No
  Reactivity: Yes

VIII - SPECIAL PROTECTION INFORMATION

Respiratory protection: A respirator that is recommended or approved for use in an organic vapor environment (air purifying or fresh air supplied) is necessary. Observe OSHA regulations for respirator use. Ventilation should be provided to keep exposure levels below OSHA permissible levels.

Ventilation: Exhaust ventilation sufficient to keep the airborne concentrations of solvent vapors or mists below their respective TLV’s must be utilized. Remove all ignition sources (heat, sparks, flame and hot surfaces.)

Protective gloves: Protective gloves are recommended (cotton, neoprene, rubber, polyethylene) to prevent skin contact.

Eye protection: The use of safety eyewear is recommended, including splash guards or side shields, chemical goggles or face shields.

Other protective equipment: The use of long sleeves and long leg clothing is recommended. Remove and wash contaminated clothing before reuse.

WoodWrite Semi Gloss Polish (CN-16)
IX - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storage: Store in buildings designed to comply with OSHA 1910.106. Avoid storing near high temperatures, fire, open flames and spark sources. Store in tightly closed containers. Store in well ventilated areas.

Other precautions: Keep containers tight and upright to prevent leakage. Prevent prolonged breathing of vapors or spray mists. Prolonged overexposure may cause an allergic reaction. Avoid contact with skin and eyes. Do not handle until the manufacturer's safety precautions have been read and understood. Wash hands before eating, smoking or using washroom. Smoke in smoking areas ONLY.

*** TRANS: ORTATION INFORMATION ***

Applicable regulations: 49CFR (ye); IMCO (no); IATA (no);
Military Air (AFR 71-4) (no)
Proper shipping name: Paint UN number: UN-1263
Reportable quantity: Not applicable
Hazard class: Flammable liquid
This material, when packaged in containers of 1 liter or less, qualifies as paint in limited quantities of Class 3.
Required labels: Flammable liquid
US Postal Service regulations: Not allowed to send via US Postal Service.

*** DISCLAIMER ***

Information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of the materials and for the safety and health of their employees.

Actual VOC determined per EPA Reference Method 24.

X - REGULATORY INFORMATION

SARA 313:

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right To Know Act of 1986 and of 40 CFR 372:

<table>
<thead>
<tr>
<th>CAS number</th>
<th>Chemical name</th>
<th>Weight percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-88-3</td>
<td>Toluene</td>
<td>16.13</td>
</tr>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
<td>4.13</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Isopropanol anhydrous</td>
<td>2.06</td>
</tr>
<tr>
<td>1330-20-7</td>
<td>Xylene</td>
<td>1.94</td>
</tr>
<tr>
<td>557-05-1</td>
<td>Zinc stearate</td>
<td>1.54</td>
</tr>
<tr>
<td>100-41-4</td>
<td>Ethyl benzene</td>
<td>0.40</td>
</tr>
</tbody>
</table>

WoodWrite Semi Gloss Polish (CN-16)
PROP 65 Careinogenic:
Warning: This product contains a chemical known to the state of California to cause cancer.

none

PROP 65 Teratogenic:
Warning: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

none