Material Safety Data Sheet

Section 1  General Information

Manufacturer:
Zinsser Company, Inc.
173 Belmont Drive
Somerset, NJ 08875
(732) 469-8100

Emergency Telephone:  Chemtrec (800) 424-9300
Date:  December 1, 2006

Product Name:  4 lb. Amber Shellac
Product Codes:  00600  00601  00655

Section 2  Hazardous Ingredients

<table>
<thead>
<tr>
<th>Hazardous Component</th>
<th>CAS#</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>400 ppm</td>
<td>200 ppm</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>108-10-1</td>
<td>100 ppm</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

Section 3  Hazard Identification

Emergency Overview:  This material is cloudy amber colored liquid coating used to finish wood and other surfaces.  It has an alcohol type odor and a flashpoint of 60° F.

Primary Routes of Exposure:
Inhalation

Potential Acute Health Effects:
Eye:  May cause eye irritation.
Skin:  May cause skin irritation.
Ingestion:  May be harmful if swallowed.
Inhalation:  Vapors may be irritating to eyes and respiratory tract.  May cause CNS depression.

Potential Chronic Health Effects:
Signs and Symptoms:  Chronic exposures may result in irritation to mucous membranes, headache, drowsiness, CNS depression, and/or liver damage.

(See also Sections 4, 8, and 11 for related information)
Section 4  First Aid Measures

Eye contact:  Flush eyes with water for at least 15 minutes.

Skin contact:  Wash with soap and water.

Ingestion:  If the person is conscious and able to swallow have them drink water to dilute. Call a poison control center, physician, or emergency room.

Inhalation:  If exposed to excessive levels of vapor or mist, remove to fresh air. Seek medical attention if cough or other symptoms develop.

Section 5  Fire Fighting Measures

Flash Point (method):  60° F

Extinguishing Media:  Use dry chemical, “alcohol resistant” foam, or carbon dioxide. Water may be ineffective but water applied as a spray can absorb some of the fire’s heat and should be used to keep fire-exposed containers cool.

Protection of Firefighters:  As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH and full protective gear. Evacuate area and fight fire from safe distance.

Fire and Explosion Hazards:  Vapors may form explosive mixture with air.

Section 6  Accidental Release Measures

Personal Precautions:  Avoid skin contact. Avoid breathing vapors. Wash hands before eating.

Clean Up Methods:  Keep unnecessary people away. Remove all sources of ignition. Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid to containers for recovery or disposal. Keep spill out of sewer and open bodies of water. Floors may be slippery; care should be exercised to avoid falls. Avoid runoff into storm sewers and ditches that lead to waterways.

(See also Section 8 for information on Exposure Controls and Personal Protective Equipment)

Section 7  Handling and Storage

Handling:  Keep away from heat, spark, and flame. Keep operating temperatures below ignition temperatures at all times. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing.
Storage: Store away from heat. Keep away from heat, sparks and flame. Keep containers tightly closed and upright when not in use. Protect against physical damage.

Section 8 Exposure Controls / Personal Protection

Engineering Controls: Use general room dilution ventilation, process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal Protective Equipment (PPE):

Eye Protection: Where contact is likely, wear chemical splash goggles and/or full-face shield.

Skin Protection: Where contact is likely, wear chemical resistant gloves and other protective clothing to prevent skin contact.

Respiratory Protection: Wear vapor levels exceed allowable exposure limits, wear a NIOSH approved air purifying respirator with an organic vapor cartridge.

General Hygiene Practices: Avoid eye and skin contact. Avoid breathing vapors. Wash hands before eating and drinking. Do not smoke while using this material.

Section 9 Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Cloudy amber liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol type odor</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>4.5 – 5.5</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>173°F*</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>40 mm/Hg*</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>1.59*</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/D</td>
</tr>
<tr>
<td>Viscosity</td>
<td>25 – 300 cps</td>
</tr>
<tr>
<td>Specific Gravity (water = 1)</td>
<td>0.89</td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>685°F*</td>
</tr>
<tr>
<td>VOC Content</td>
<td>≤ 730 g/l</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>The alcohol portion is soluble in water, the shellac portion is not soluble and will form a gelatinous layer on top of water.</td>
</tr>
</tbody>
</table>

* based on pure ethyl alcohol.
Section 10 Stability and Reactivity

Stability: Stable, non-reactive.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon monoxide during incomplete combustion.

Conditions to Avoid: Heat, sparks, flames.

Incompatibility: Oxidizing agents

Section 11 Toxicological Information

Carcinogenicity: This material is not considered a carcinogen by IARC or NTP and is not regulated as a carcinogen by OSHA.

(See also Section 15 for related information)

Section 12 Ecological Information

Chemical Fate and Effects: No data available.

Section 13 Disposal Considerations

RCRA Hazardous Waste: This material, when discarded or disposed of, could be a hazardous waste according to federal regulations (40 CFR 261) due to the characteristic of ignitability (D001). The transportation, storage, treatment, and disposal of this waste must be conducted in compliance with 40 CFR 262, 263, 264, 268, and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate.

Section 14 Transportation Information

Regulated by the DOT: Yes

DOT Proper Shipping Name: Paint

UN / NA Number: UN 1263

Class: 3, Flammable Liquid

Packing Group: II
Section 15 Regulatory Information

CERCLA:
The Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification to the National Response Center for releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQs) in 40 CFR 302.4 (for CERCLA 102).

Components present in this product at a level which could require reporting under the statute are:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Maximum Concentration (Wt. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SARA Title III, section 311/312:
The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312).

Components present in this product at a level which could require reporting under the statute are:

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<th>Maximum Concentration (Wt. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SARA Title III, section 313:
The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40 CFR 372 (for SARA 313).

Components present in this product at a level which could require reporting under the statute are:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Maximum Concentration (Wt. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>108-10-1</td>
<td>1%</td>
</tr>
</tbody>
</table>

TSCA:
The components of this mixture are listed in the Toxic Substance Control Act Inventory of Chemical Substances.

This product contains the following chemicals which require export notification under section 12(b) of the TSCA regulation:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>TSCA Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

Section 16 Other Information

N/A: Not Applicable   N/D: Not Determined   N/E: Not Established   N/R: Not Required   Est.: Estimated

4 Lb. Amber Shellac MSDS (12-1-06)
Legend:  N/A: Not Applicable  
N/E: Not Established 
STEL: Short Term Exposure Limit 
cps: Centipoise 
mpcf: million particles per cubic foot of air. 
PPB: Parts Per Billion 
TLV: Threshold Limit Value 
ACGIH: American Conference of Governmental Industrial Hygienists 
CPSC: Consumer Product Safety Commission 
DOT: United States Department of Transportation 
FHSA: Federal Hazardous Substance Act 
OSHA: Occupational Safety and Health Administration (US Dept. of Labor) 
RCRA: Resource Conservation and Recovery Act 
SARA: Superfund Amendment and Reauthorization Act 
Skin: This substance has the potential to be absorbed systemically through the skin. 
TSCA: Toxic Substance Control Act

Prepared By:  Zinsser Health and Safety Manager, Regulatory Compliance Dept.  
173 Belmont Drive        Somerset, NJ 08875         (732) 469-8100

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