

Idem #'s Pg. 1
26010+
26020

MANTROSE-HAEUSER COMPANY
1175 Post Road East
Westport, CT 06889

MATERIAL SAFETY DATA SHEET

SECTION I - GENERAL INFORMATION

MSDS NO: EMERGENCY NO: 1-800-255-3924
(CHEMTEL)
DATE: 3/10/94 GENERAL INFORMATION NO: (203)-454-1800
(MANTROSE-HAEUSER CO. AND
PREPARED BY: KAREN LOPES MANTROSE, BRADSHAW,
ZINSSER GROUP)

SECTION II - IDENTIFICATION

PRODUCT NAME: 2.5 up to 10.5% Pure Shellac Varnish in SDA 1- 190 Proof
SYNONYMS: Pure White/Pure Orange/Refined Shellac Varnish
CHEMICAL FAMILY: Natural Resin

SECTION III - HAZARDOUS INGREDIENTS

<u>COMPOSITION</u>	<u>CAS RN</u>	<u>NOMINAL %</u>	<u>PEL/TLV</u>	<u>HAZARD</u>
Ethyl Alcohol	64-17-5	34.00	1000 ppm	Flammable/Nervous System Depressant
**Methyl Alcohol	67-56-1	1.40	PEL-TWA 200 ppm TLV-TWA 200 ppm STEL-250 ppm	Flammable Poison
**Methyl Isobutyl Ketone	108-10-1	0.35	PEL-TWA 100 ppm TLV-TWA 50 ppm STEL-75 ppm	Flammable/Irritant Narcotic

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SECTION IV - PHYSICAL PROPERTIES

BOILING POINT: 173 F* SPECIFIC GRAVITY (H2O=1): 0.890 - 1.012 @ 60F
MELTING POINT: - 173 F* SOLUBILITY IN WATER: Not Determined
VAPOR PRESSURE (mm Hg): 44.6 @ 68F* EVAPORATION RATE (BUTYL ACETATE =1): >1
VAPOR DENSITY (AIR =1): 1.59* APPEARANCE + COLOR: Pale Yellow/Orange Liquid
Characteristic pleasant odor

MAX VOC = 388 - 651 GPL

* - For Pure Ethyl Alcohol

** - Indicates chemicals subject to the reporting requirements of SARA 313 and 40 CFR

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SECTION V - HEALTH INFORMATION

INHALATION: Exposure to over 1000 ppm may cause headache, drowsiness, and lassitude, loss of appetite and inability to concentrate. Irritation of the throat.

INGESTION: Can cause depression of central nervous system, vomiting, nausea, diarrhea

EYE CONTACT: Liquid or vapor may cause irritation.

SKIN CONTACT: May cause irritation and defatting of skin on prolonged contact.

HMS RATING: 2/3/0

OTHER: Individual responses to methyl alcohol vary. Ingestion of less than 30 ml (0.34 g/kg) has been fatal to humans. In general, a few ounces may cause blindness and death. As little as 4 ml may be toxic if ingested.

SECTION VI - EMERGENCY FIRST AID PROCEDURE

FOR OVER EXPOSURE BY:

SWALLOWING: If victim is conscious and able to swallow, have victim drink water or milk to dilute. Never give anything by mouth if victim is unconscious or having convulsions. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. Induce vomiting only if advised by physician of poison control center.

INHALATION: Immediately remove victim to fresh air if victim has stopped breathing. Give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

CONTACT WITH EYES OR SKIN: Immediately flush affected area with plenty of cool water. Eyes should be flushed for at least 15 minutes. Remove and wash contaminated clothing before re-use. GET MEDICAL ATTENTION IMMEDIATELY.

SECTION VII - REACTIVITY

STABILITY: Generally Stable

HAZARDOUS POLYMERIZATION: Not likely

CONDITIONS & MATERIALS TO AVOID: Contact with acetyl chloride and a wide range of oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may produce Carbon Monoxide and/or Carbon Dioxide

SECTION VIII

FLASH POINT (METHOD USED): 57F ASTM D56 (Tag Closed Cup)

FLAMMABLE LIMITS IN AIR, % BY VOL. LOWER: 3.3

UPPER: 19*

NFPA RATING: HEALTH (0) FIRE (3) REACTIVITY (0)
(DOES NOT APPLY TO EXPOSURE HAZARDS OTHER THAN DURING A FIRE)

FIRE FIGHTING PROCESURES:

Use dry chemical, "alcohol foam, or Carbon Dioxide. Water may be ineffective, but water should be used to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Water spray may be used to flush spills away from exposures.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products

* For Pure Ethyl Alcohol

SECTION IX - EMPLOYEE PROTECTION

CONTROL MEASURES:

Handle in the presence of adequate ventilation.

RESPIRATORY PROTECTION:

Where exposure is likely to exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminant in air.

PROTECTIVE CLOTHING:

Wear gloves and protective clothing which are impervious to this product for the duration of anticipated exposure if there is potential for skin contact.

EYE PROTECTION:

If no eye contact anticipated, wear safety glasses meeting specifications of ANSI Standard Z87.1 - If eye contact anticipated, wear chemical safety goggles meeting specs of ANSI Standard Z87.1

SECTION X - ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS:

Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

SPILL OR LEAK PROCEDURES:

Wear appropriate respiratory protection and protective clothing as described in Section IX. Contain Spilled Material. Transfer to secure containers. Where necessary collect using absorbent media. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under applicable laws and regulations.

WASTE DISPOSAL:

All recovered material should be packaged, labeled transferred and disposed or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices.

SECTION XI - PRECAUTIONS, HANDLING, STORAGE AND USAGE

Protect container against physical damage. Detached or outside storage is preferred. Inside storage should be in a NFPA approved flammable liquids storage room or cabinet. All ignition sources should be eliminated. Smoking should be prohibited in storage areas. Electrical installations should be in accordance with article 501 of the National Electrical Code. NFPA 30. Flammable and combustible liquids code should be followed for all storage and handling. Frequent careful leakage inspection should be done. Automatic spring system should be provided. Isolate from oxidizers, chemicals capable of spontaneous heating materials reacting with air or moisture to liberate heat ignition sources and explosives. Consult local fire codes for additional storage information.

Keep closure up to prevent leakage and remove closure carefully because internal pressure may be present. Avoid breathing vapor and use with adequate ventilation.

SECTION XII - REGULATORY CONTROLS

DEPARTMENT OF TRANSPORTATION:

DOT CLASSIFICATION: Flammable Liquid

DOT PROPER SHIPPING NAME: Resin Solution

OTHER DOT INFORMATION: UN 1856

WARNING: This product may contain trace amounts of some chemicals known to the State of California to be carcinogens or reproductive toxins.