

**Hats By Leko**  
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**MATERIAL SAFETY DATA SHEET**

**SECTION I-IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY UNDERTAKING**

MSDS NO: EMERGENCY NO: 1-800-255-3924 (CHEMTEL)  
DATE :1/9/95 INTERNATIONAL ACCESS CODE +1-813-248-0585

REVISION DATE:5/21/01 GENERAL INFORMATION NO: 541 354-2600

Supersedes: 3/10/97  
PREPARED BY: ELAINE ALTONIAN

PRODUCT NAME: FELT HAT STIFFENER

SYNONYMS: Shellac Varnish

CHEMICAL FAMILY: Resin Solution

**SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS**

COMPOSITION	CAS RN	NOMINAL %	PEL/TLV	HAZARD
Ethyl Alcohol	64-17-5	75.03	1000 ppm	Flammable/Nervous System Depressant
Isopropyl Alcohol	67-63-0	12.5	PEL-TWA 400ppm TLV-TWA 400ppm STEL 250ppm	Flammable/Irritant
** Methyl Alcohol	67-56-1	3.85	PEL-TWA 200 ppm TLV-TWA 200 ppm STEL-250 ppm	Flammable Poison
** Methyl Isobutyl Ketone	108-10-1	0.96	PEL-TWA 100 ppm TLV-TWA 50 ppm S TEL-75 ppm	Flammable/Irritant Narcotic

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

**SECTION III - HAZARDS: (IDENTIFY)**

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

INGESTION: Can cause depression of central nervous system, vomiting, nausea and 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 30ml (0.34 g/kg) has been fatal to humans. In general, a few ounces may cause blindness and death. As little as 4ml may be toxic if ingested.

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## **SECTION IV - FIRST AID MEASURES**

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### **FOR OVEREXPOSURE 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!!

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## **SECTION V - FIRE FIGHTING MEASURES**

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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.

FLAMMABLE LIMITS IN AIR, % BY VOL.: LOWER 3.3 UPPER: 19\*

NFPA RATING: HEALTH ( ) FIRE (3) REACTIVITY ( )

(does not apply to exposure hazards other than during a fire)

\* - For Pure Ethyl Alcohol

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## **SECTION VI - ACCIDENTAL RELEASE MEASURES**

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Wear appropriate respiratory protection and protective clothing as described in Section VIII. 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.

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## **SECTION VII - HANDLING & STORAGE**

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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 sprinkler 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.

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**SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**

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Ventilation: 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 chemically resistant 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 is anticipated, wear safety glasses meeting specifications of ANSI Standard Z87.1. If eye contact is anticipated, wear chemical safety goggles meeting specs of ANSI Standard Z87.1.

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**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES:**

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BOILING POINT: 173°F                      SPECIFIC GRAVITY: 0.823 @ 60°F  
MELTING POINT: -173 °F                      SOLUBILITY IN WATER: N/D                      VAPOR PRESSURE: 44.6@68°F  
EVAPORATION RATE (Butyl Acetate = 1): >1                      VAPOR DENSITY: 1.59\*  
APPEARANCE/COLOR: Pale Yellow Liquid  
pH: N/D                      FLASH POINT: 61°F ASTM D-56 (Tag Closed Cup)                      ODOR: Characteristic pleasant odor.  
FLAMMABLE LIMITS IN AIR, % BY VOL: LOWER: 3.3    UPPER: 19\*  
NFPA RATING: HEALTH ( )    FIRE (3)    REACTIVITY ( )  
(Does not apply to exposure hazards other than during a fire.)  
Max Voc = 684 GPL

\* - For Pure Ethyl Alcohol

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**SECTION X - STABILITY AND REACTIVITY**

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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.

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**SECTION XI - TOXICOLOGICAL INFORMATION**

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No Data

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**SECTION XII - ECOLOGICAL INFORMATION**

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

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**SECTION XIII - DISPOSAL INFORMATION**

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

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**SECTION XIV TRANSPORTATION INFORMATION**

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DEPARTMENT OF TRANSPORTATION: ***DOMESTIC & EUROPEAN***

DOT CLASSIFICATION: Flammable Liquid

DOT PROPER SHIPPING NAME: Paint

OTHER DOT INFORMATION: UN 1263

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**SECTION XV - REGULATORY INFORMATION:**

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Subject to requirements of SARA 313 and 40 CFR.

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**SECTION XVI - OTHER INFORMATION:**

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Revision issued to conform to DSD 67/548 EEC, DPD 88/379 EEC, DPD 91/155 EEC.

**REVISION LOG:**

Date:	Reason;	By whom:
5/21/01	Remove MBZ name & change int'l phone number.	SAS

**Approved by: Sandra Leko**

**HAT/Felt hat Stiffener**

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