

MATERIAL SAFETY DATA SHEET

U.S. Chemical & Funeral Supplies, 300 N.E. 59th St., Miami, Fla. 33137 800/423-6366

Product Identification: LIQUID SEALER / Derma-Seal

Rev . /89

Emergency Phone ... CHEMTREC 1-800-424-9300 day or night.

Product Class: LACQUER

Hazard Ratings: Health - 2
None - extreme Fire - 3
0 - - - 4 Reactivity - 2

SECTION II - HAZARDOUS INGREDIENTS:

Ingredients	CAS #	Weight %	Exposure Limits	Vapor Pr. mm Hg
ISOBUTANOL	78-83-1	5-20	50 ppm	8.8
TOLUENE**	108-88-3	20-50	100 ppm	24
ALIPHATIC HYDROCARBONS	64742-89-8	5-20	200 ppm	60
ISOPROPYL ALCOHOL**	67-63-0	1-5	400 ppm	33
NITROCELLULOSE	9004-70-0	5-20	Undetermined	
ISOBUTYL ACETATE	110-19-0	5-20	150 ppm	12.5
METHYL ISOBUTYL KETONE**	108-10-1	5-20	50 ppm	15.
METHYL ETHYL KETONE**	78-93-3	5-20	200 ppm	77.5

SECTION III - PHYSICAL DATA

Boiling Range: 156 - 750 Deg. F
Evap. Rate: 1.86 x n-Butyl Acetate
Volatiles volume: 94.8 %
Appearance:
Vapor Density: Heavier than Air.
Liquid Density: Lighter than Water.
Wgt. per gallon: 7.39 Pounds.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: 1B Flash Point: 16 F too LEL: 1.

- EXTINGUISHING MEDIA:

The National Fire Protection Association (NFPA) classifies burning liquids as class B fires. Therefore, any approved class B fire extinguisher or extinguishing agent may be used for firefighting purposes. For example:

Dry chemical. Foam. Carbon Dioxide.

- SPECIAL FIREFIGHTING PROCEDURES:

Full protective equipment including self-contained breathing apparatus should be used. Water Spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat.

- UNUSUAL FIRE & EXPLOSION HAZARDS:

*** EXTREMELY FLAMMABLE *** Keep containers tightly closed. Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and cause flash fires or be ignited explosively by pilot lights, sparks, heaters, smoking flames, electric motors, or other sources of ignition at locations distant from material handling point; Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA (cont)

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- UNUSUAL FIRE & EXPLOSION HAZARDS: (cont.)

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively during emergency conditions over-exposure to decomposition may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

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SECTION V - HEALTH HAZARD DATA

- PERMISSIBLE EXPOSURE LEVEL:

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Any item in section II marked with ** is a toxic chemical subject to the reporting requirements of section 313 of SARA TITLE III and of 40 CFR 372

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Exposure limits listed in section II are expressed as TLV unless noted here.

Isobutanol OSHA PEL =50ppm. ACGIH TLV=50ppm

Toluene OSHA PEL=100ppm. TLV=100ppm ACGIH TWA

Aliphatic Hydrocarbons OSHA PEL=500ppm. ACGIH TLV= NOT Established

Isopropanol OSHA PEL=400 ppm. ACGIH TLV=400ppm.

Nitrocellulose OSHA PEL & ACGIH TLV are not established

Isobutyl Acetate OSHA PEL=150ppm. ACGIH TLV=150ppm.

Methyl Isobutyl Ketone OSHA PEL=100ppm. TLV=50ppm ACGIH TWA.

Methyl Ethyl Ketone OSHA PEL=200ppm. ACGIH TLV=200ppm.

- EFFECTS OF OVEREXPOSURE:

---EYES--- Can cause severe irritation. Redness. Tearing and blurred vision.

---SKIN--- Prolonged or repeated contact can cause moderate irritation, defatting and Dermatitis. Repeated contact may cause sensitization.

---BREATHING--- Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation.

---SWALLOWING--- Can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Aspiration of material into the lungs can cause chemical Pneumonitis which can be fatal. Prolonged exposures to Isobutanol may cause eye and respiratory tract irritation and central nervous system depression (in high vapor concentrations) And prolonged skin contact with liquid may cause chemical burns.

Overexposure to Toluene may cause liver damage & kidney damage. Central nervous system depression (in high concentrations). And brain cell damage from long term inhalation of vapors.

Overexposure to Aliphatic Hydrocarbons may cause respiratory tract irritation and Narcosis (in high vapor concentrations).

Overexposure to Isopropanol May cause severe eye irritation, skin, nasal and respiratory tract irritation, and narcosis (in high vapor concentrations.)

Overexposure to ISOBUTYL ACETATE may cause mucous membrane irritation and narcosis (in high vapor concentrations) and may also cause eye and skin irritation.

Overexposure to METHYL ISOBUTYL KETONE may cause respiratory tract irritation and central nervous system depression (in high vapor concentrations) Prolonged exposure to high vapor concentration may cause liver and kidney damage.

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central nervous system depression. And narcosis (in high vapor concentrations) Repeated and prolonged exposure of skin to liquid may cause irritation and Dermatitis.

- FIRST AID:

- IF IN EYES-- Flush with large amounts of water. Lifting the upper and lower lids occasionally - Get medical attention.
- IF ON SKIN-- Thoroughly wash exposed area with soap and water, remove contaminated clothing and launder before re-use
- IF BREATHED-- If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.
- IF SWALLOWED-- DO NOT INDUCE VOMITING. Keep person warm, quiet, and get medical attention. Aspiration of material into the lungs due to vomiting can cause Pneumonitis which can be fatal.

SECTION VI - REACTIVITY DATA

- STABILITY: () Unstable (x) Stable
- HAZARDOUS POLYMERIZATION: () May occur (x) Will not occur
- INCOMPATIBILITY:
 - Strong Oxidizing Agents: Sulfuric Acid.
 - Avoid strong acids or alkalis
 - Avoid contact with strong oxidizing agents, Acids, or bases and selected amines.
 - Avoid contact with anhydride, isocyanate, monomer and organometallic contaminants
 - Avoid contact with strong acids, bases or oxidizing agents, amines, alkanolamines alkaline materials, halogens, ammonia, aldehydes and chlorinated compounds, and will dissolve some plastics, rubber, and coatings.
- CONDITIONS TO AVOID:
 - High temperature or heat or open flames.
 - Do not leave lids off containers for extended periods. Dry nitrocellulose burns rapidly with intense heat and ignites easily. Heat, impact or friction can lead to ignition.
- HAZARDOUS DECOMPOSITION PRODUCTS:
 - Thermal decomposition may produce carbon monoxide, carbon dioxide, oxides of nitrogen, and toxic fumes.

SECTION VII - SPIL OR LEAK PROCEDURES

- STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED.
 - Remove all sources of ignition (flames, hot surfaces, pilot, lights, and electric, static or frictional sparks) Avoid breathing vapors, ventilate area, remove with inert absorbent and non-sparking tools. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- WASTE DISPOSAL METHOD:
 - Dispose in accordance with local, state and federal law regulations. Incinerate in approved facility, do not incinerate closed containers.

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SECTION VIII - SPECIAL PROTECTION INFORMATION:

- RESPIRATORY PROTECTION:

If the "TLV" of the product or any component is exceeded, a NIOSH/MESA jointly self-contained breathing apparatus with a full face piece operated in pressure demand or other positive pressure mode is advised. However, OSHA regulations also permit other NIOSH/MESA respirators under specific conditions. Areas of storage and use should be surveyed by a qualified industrial hygienist to assure adequacy of respiratory protection. Ventilation, and other protective equipment.

- VENTILATION:

Provide general dilution or local exhaust ventilation in volume and patterns to keep TLV of all hazardous ingredients in section II below acceptable limit: LEL in section II below stated limit.

- PROTECTIVE GLOVES:

Required for prolonged or repeated contact.

- EYE PROTECTION:

Use safety eyewear designed to protect against splash of liquid

- OTHER PROTECTIVE EQUIPMENT:

Wear impervious clothing and boots to prevent repeated or prolonged skin contact.

SECTION IX - SPECIAL PRECAUTIONS

- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Keep away from heat, sparks, fire, and all ignition sources. Do not leave containers open. Do not store above 100 degrees F, store in buildings designed and protected for storage of NFPA CLASS 1 flammable liquids. Use in areas designed and protected for use of class 1 flammable liquids.

- OTHER PRECAUTIONS:

Use only with adequate ventilation, avoid prolonged or repeated breathing of vapor. Avoid contact with eyes or skin. Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. Store, dispense and use in accordance with NFPA standards for Class 1 flammable liquids. Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid) All hazard precautions given in this data sheet must be observed.

*** FOR INDUSTRIAL USE ONLY, NOT FOR HOUSEHOLD USE ***

NOTICE: REPORTS HAVE ASSOCIATED REPEATED and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

The information accumulated herein is believed to be accurate but is not warranted to be. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable for their circumstances.
