

Material Safety Data Sheet

MULE-HIDE TPO LOW-VOC TAPE PRIMER

Date of Preparation: 01/01/07

Revision: 008

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: MULE-HIDE TPO LOW-VOC TAPE PRIMER
Chemical Formula: Mixture
General Use: Cleaner/Primer for TPO Roofing Membrane
Manufacturer: Mule-Hide Products Co., Inc., P.O. Box 1057, Beloit, WI 53512 Phone: 800-786-1492
 Emergency Phone Number: CHEMTREC(USA): 800-424-9300

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Polymeric Diisocyanate	53880-05-0	2-3
Petroleum Distillate, Light Hydrotreated	Trade Secret	
Tackifying Resin	Trade secret	
Synthetic Polymer	Trade secret	

Hazardous Ingredients:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Polymeric Diisocyanate	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.	None estab.
Petroleum Distillate, Light Hydrotreated	5 ppm (as oil mist)	None estab.	5 ppm (as oil mist)	None estab.	5 ppm (as oil mist)	None estab.	None estab.

Section 3 - Hazards Identification

☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆

HMIS	
H	1
F	1
R	0
PPE [†]	
	[†] Sec. 8

Potential Health Effects

Primary Entry Routes: Skin contact, skin absorption, eye contact, inhalation and ingestion.

Target Organs:

Acute Effects

Inhalation: May cause breathlessness, coughing, chest discomfort, reduced pulmonary function, and irritation of nasal passages.

Eye: May cause irritation, tearing, reddening, swelling and stinging of the eyes.

Skin: May cause irritation (tearing, reddening, swelling, rash or blistering); skin sensitization may develop in some individuals.

Ingestion: May cause irritation to mouth, stomach, and digestive tract.

Carcinogenicity: IARC, NTP, and OSHA do not list this product as a carcinogen.

Chronic Effects: Repeated overexposure may cause sensitization (chest tightness, coughing, shortness of breath, or asthmatic attack) in certain individuals that can lead to permanent lung damage. Prolonged skin contact can cause reddening, swelling, rash or blistering, which can develop in some persons after contact with only a small amount of liquid. Prolonged vapor contact with eyes may cause conjunctivitis.

Section 4 - First Aid Measures

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.

Eye Contact: Immediately flush eyes with running water for at least 15 minutes. Get medical attention.

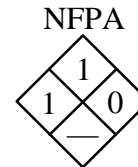
Skin Contact: Immediately flush skin with running water and remove contaminated clothing. Wash exposed area with soap and water. Get medical attention.

Ingestion: Do not induce vomiting. Get medical attention immediately.

Special Precautions/Procedures: Whenever possible, remove the worker from the source of contamination.

Section 5 - Fire-Fighting Measures

Flash Point: 93°C (200°F)
Flash Point Method: Pensky-Martens closed cup
Autoignition Temperature: 260°C (500°F)
LEL: 0.9%v/v (estimated)
UEL: 7.0%v/v (estimated)
Flammability Classification: Division 2



Extinguishing Media: In case of fire, use dry chemical, carbon dioxide, or foam. Water may not be effective as an extinguishing agent. Water fog or spray may be used to provide a smothering effect on fire and to cool fire-exposed containers and surrounding combustibles. Do not use a solid stream of water because it can scatter and spread the fire.
Unusual Fire or Explosion Hazards: Combustible liquid-Keep away from sparks and open flame.
Hazardous Combustion Products: Toxic gases or vapors, such as carbon monoxide or carbon dioxide, may be released in a fire.
Fire-Fighting Instructions: SCBA recommended; smother to exclude air. Handle as an oil fire, Class B fire procedures.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Remove all sources of ignition. Avoid breathing vapors. Use self-contained breathing apparatus in enclosed area. Ventilate area. Contain and remove with inert absorbent materials and non-sparking tools.
Large Spills
Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Use away from all sources of heat, flame, or sparks. Do not smoke while using. Wash with soap and water before eating or drinking. Launder contaminated clothing. KEEP OUT OF REACH OF CHILDREN.
Storage Requirements: Keep containers cool, dry, and store way from all sources of heat, flame, and sparks. Keep containers tightly closed and store with adequate ventilation. Do not pressurize, cut, weld, or grind the containers or empty containers, which may contain residual product and solvent vapors that may ignite explosively.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Do not use in enclosed areas without proper ventilation. General and local exhaust ventilation must be sufficient to control vapor concentrations and keep the vapor concentration below PEL.
Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
Administrative Controls:
Respiratory Protection: Approved NIOSH respirator recommended if working in very high mist or vapor concentrations.
Protective Clothing/Equipment: Impermeable gloves recommended. Safety glasses or goggles recommended. Industrial shoes to protect feet from contact with cleaner. Long sleeves, long trousers to protect skin from adhesive contact.
Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.
Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid	Water Solubility: not soluble
Appearance and Odor: Green, oily appearance and odor	Boiling Point: 199°C
Vapor Pressure: Less than 0.5mm Hg at 20°C	Freezing/Melting Point: N/A
Vapor Density (Air=1): Heavier than air	% Volatile: 25-27
Specific Gravity (H₂O=1, at 4 °C): 0.84	Evaporation Rate: Less than 1
pH: N/A	

Section 10 - Stability and Reactivity

Stability: Stable.
Polymerization: Will not occur.
Chemical Incompatibilities: Strong oxidizing agents, acids, bases.

Conditions to Avoid: Heat, sparks, open flame; ignition sources.

Hazardous Decomposition Products: Toxic gases or vapors, such as carbon monoxide, carbon dioxide or oxides of nitrogen may be released in a fire.

Section 11- Toxicological Information

Eye Effects: Irritating

Skin Effects: Irritating

Toxicity Data:

Acute Inhalation Effects: No data available

Acute Oral Effects: No data available

Chronic Effects: May cause skin sensitization in some people

Carcinogenicity: No evidence

Mutagenicity: No evidence

Teratogenicity: No evidence

Section 12 - Ecological Information

Ecotoxicity: This product has not been tested. No data available.

Environmental Fate: No data available.

Environmental Degradation: No data available.

Soil Absorption/Mobility: No data available.

Section 13 - Disposal Considerations

Disposal: Dispose of in accordance with all local, state, and federal regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Combustible
Liquid, n.o.s.

Shipping Symbols:

Hazard Class: Combustible

ID No.: NA 1993

Packing Group: III

Label: None required

Special Provisions (172.102):

IB3, T1, T4, TP1

Packaging Authorizations

a) **Exceptions:** 173.150

b) **Non-bulk Packaging:** 173.203

c) **Bulk Packaging:** 173.241

Quantity Limitations

a) **Passenger, Aircraft, or Railcar:** 60 L

b) **Cargo Aircraft Only:** 220 L

Vessel Stowage Requirements

a) **Vessel Stowage:** A

b) **Other:** --

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number (40 CFR 261.33): Not listed

RCRA Hazardous Waste Classification (40 CFR 261): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) Not listed specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), N/A

SARA 311/312 Codes: Not listed

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910): None

State Regulations: Not listed under state regulations (California, Delaware, Florida, Massachusetts, Michigan, Minnesota, New Jersey, New York, Pennsylvania or Washington).

Section 16 - Other Information

Prepared By: Mule-Hide Products Co., Inc. Customer Service Department.

Revision Notes: Converted to new 16-part MSDS format

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