

# Material Safety Data Sheet

Product Name: Mule-Hide Tape Primer

Date of Preparation: 09/15/2008

Revision: 011

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** Mule-Hide Tape Primer

**General Use:** Primer for EPDM and TPO Membranes **Chemical Formula:** Mixture

**Supplier:** Mule-Hide Products Co., Inc. 1195 Prince Hall Dr, Beloit, WI 53511 Phone: 800-789-1492

**Manufacturer:** Carlisle SynTec Incorporated, 1285 Ritner Highway, Carlisle, PA 17013, Phone – 800-479-6832, 24-Hour Emergency Phone Number: CHEMTREC (USA): 800-424-9300

## Section 2 - Hazards Identification

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Danger – Highly flammable liquid and vapor

Warning – Causes skin irritation

Warning – Causes eye irritation

Warning – May be harmful if swallowed and enters airways

Danger – May damage fertility or the unborn child

Warning – May cause an allergic skin reaction

Warning – Suspected of causing genetic defects (skin)

Warning – May cause drowsiness and dizziness

Warning – May cause damage to organs (liver, kidney, ear) through prolonged or repeated exposure

### Potential Health Effects

**Primary Entry Routes:** Eye contact, ingestion, inhalation, skin absorption, skin contact.

**Target Organs:** Kidney and liver.

#### Acute Effects

**Inhalation:** May cause nose and/or throat irritation on short-term exposure to vapor. Aspiration into lungs can cause chemical pneumonitis, which can be fatal. Overexposure may result in headache, dizziness, fatigue, nausea and loss of consciousness.

**Eye:** May cause eye irritation on short-term exposure to liquid or vapor.

**Skin:** May cause skin irritation on short-term exposure to liquid or vapor. Solvents may be absorbed through the skin in toxic amounts.

**Ingestion:** May cause irritation of gastrointestinal tract.

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

**Medical Conditions Aggravated by Long-Term Exposure:** May cause more significant skin irritation in people with pre-existing skin conditions. Respiratory symptoms associated with pre-existing lung disorders and pre-existing heart disorders may be aggravated by exposure to this material.

**Chronic Effects:** Chronic exposure may cause reversible kidney and liver injury. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Repeated exposure to Toluene has been associated with high frequency hearing loss based on animal tests.

#### HMIS

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## Section 3 – Ingredient Information

Hazardous Ingredients	CAS Number	% wt
Toluene	108-88-3	60-100
Heptane	142-82-5	3-7
Hydrocarbon Tackifying Resin	68478-07-9	1-5
Additional Ingredients	CAS Number	% wt

## 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.

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**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.

**Note to Physicians:** This material contains Toluene and Heptane.

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

### Section 5 - Fire-Fighting Measures

**Flash Point:** 4.40°C (40°F)

**Flash Point Method:** C.C

**Autoignition Temperature:** 536°C (997°F)

**LEL:** 1.3% v/v

**UEL:** 7.0% v/v

**Flammability Classification:** Ignition can occur when this product is exposed to heat, Division 2 sparks, or flame.

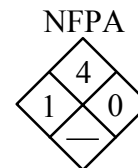
**Extinguishing Media:** In case of fire, use dry chemical, carbon dioxide, or foam. Water may not be effective as an extinguishing agent. Water fog or spray may be used to provide a smothering effect on fire and to cool fire-exposed containers and surrounding combustibles. Do not use a solid stream of water because it can scatter and spread the fire.

**Unusual Fire or Explosion Hazards:** Extremely flammable. Store and use away from all sources of heat, flame, or sparks. Do not smoke while applying. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flash back. All containers should be grounded when material is transferred.

**Hazardous Combustion Products:** Toxic gases or vapors, such as carbon monoxide or carbon dioxide, may be released in a fire.

**Fire-Fighting Instructions:** This product contains solvents that are dangerous fire and explosion hazards when exposed to heat or flame.

**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) and full protective clothing along with a full face piece operated in pressure-demand or positive-pressure mode.



### Section 6 - Accidental Release Measures

**Personal Precautions:** Use personal protection recommended in Section 8.

**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. 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. Handling equipment must be grounded to prevent sparking. Handle with non-sparking tools. 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 away 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

#### Hazardous Ingredients:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Toluene	200 ppm	150 ppm	20 ppm	None estab.	100 ppm	150 ppm	500 ppm
Heptane	500 ppm	500 ppm	400 ppm	500 ppm	85 ppm	440 ppm	750 ppm

**Engineering Controls:** Do not use in enclosed areas without proper explosion-proof ventilation. General and local exhaust ventilation must be sufficient to control vapor concentrations and keep the vapor concentration below 100 ppm.

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Respiratory Protection:** A NIOSH approved respirator must be used if vapor concentration is 100 ppm or above.

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**Protective Clothing/Equipment:** Permeation resistant gloves (that meet ANSI/ISEA 105-2005) required. Protective glasses or goggles recommended. Industrial boots to protect feet from cleaner contact. Impervious clothing is recommended to protect skin from cleaner contact. Protective skin creams or emollients useful.

**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

**Appearance and Odor:** Thin olive green to dark grey liquid with hydrocarbon odor

**Odor Threshold(ppm):** Not available

**Vapor Pressure:** 36.7 mm Hg at 30°C (86°F)

**Vapor Density (Air=1):** 3.14

**Specific Gravity (H<sub>2</sub>O=1, at 4°C):** 0.88

**pH:** Not available

**Water Solubility:** Negligible

**Boiling Point(°C):** 110.4°C (230.7°F)

**Freezing/Melting Point** -95.0°C (-139°F)

**% Volatile by Weight:** 80-90

**Evaporation Rate: (nBuAc=1):** 2.1

**Voc:** 727 g/l

**Flash Point:** 4.40°C (40°F)

**Flash Point Method:** C.C

**Autoignition Temperature:** 536°C (997°F)

**LEL:** 1.3% v/v

**UEL:** 7.0% v/v

### Section 10 - Stability and Reactivity

**Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Will not occur.

**Chemical Incompatibilities:** Strong oxidizing agents, acids, bases, amines.

**Conditions to Avoid:** Heat, sparks, and flames; ignition sources.

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

### Section 11- Toxicological Information

#### Toxicity Data:

This product has not been tested. No data available.

### Section 12 - Ecological Information

**Ecotoxicity:** No data available.

**Environmental Fate:** No data available.

**Environmental Degradation:** No data available.

**Soil Absorption/Mobility:** No data available.

### Section 13 - Disposal Considerations

**Waste 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:** Adhesives, 3

**Shipping Symbols:** Flammable

**Hazard Class:** 3

**ID No.:** UN 1133

**Packing Group:** II

**Label:** Red caution label required.

**Special Provisions (172.102):**  
149, B52, IB2, T4, TP1, TP8

#### Packaging Authorizations

a) **Exceptions:** 173.150

b) **Non-bulk Packaging:** 173.173

c) **Bulk Packaging:** 173.242

#### Quantity Limitations

a) **Passenger, Aircraft, or Railcar:** 5 L

b) **Cargo Aircraft Only:** 60 L

#### Vessel Stowage Requirements

a) **Vessel Stowage:** B

b) **Other:** --

**Section 15 - Regulatory Information**

**EPA Regulations:**

RCRA Hazardous Waste Number (40 CFR 261.33): Toluene, CAS #108-88-3, RCRA Code U220

RCRA Hazardous Waste Classification (40 CFR 261.31): Not classified

CERCLA Hazardous Substance (40 CFR 302.4): Toluene, CAS #108-88-3, RQ 1000 lb

CERCLA Reportable Quantity (RQ): Materials with a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 313 Components (40 CFR 372.65): Toluene, CAS #108-88-3, 60-100%

SARA Toxic Release Chemicals: Toluene, CAS #108-88-3, Concentration: 1.0%, Reporting Threshold: Standard

**OSHA Regulations:**

Clean Water Act Hazardous Substances: Toluene, CAS #108-88-3, RQ 1000 lb

Clean Air Act SOCM Chemicals: Toluene, CAS #108-88-3

Clean Air Act Hazardous Air Pollutants: Toluene, CAS #108-88-3, HAP Code XOY

OSHA, IARC, NTP Carcinogens: None listed.

**State Regulations:**

**California Proposition 65 Chemicals:** Toluene, CAS #108-88-3, Code D

**Delaware Air Quality Management List:** Toluene, CAS #108-88-3, DRQ: 1000, State: Y

**Massachusetts Hazardous Substances List:**

Heptane, CAS# 142-82-5, Codes: 2, 4, 5, 6

Toluene, CAS #108-88-3, Codes: 2, 4, 5, 6, F7, F8, F9

**Michigan Critical Materials Register:**

Toluene, CAS #108-88-3, Report Code: --, Class: --

**Minnesota Hazardous Substances List:**

Heptane, CAS# 142-82-5, Codes: ANO, Hazards: -, Carcinogen: No

Toluene, CAS #108-88-3, Codes: ANO, Hazards: Skin, Carcinogen: No

**New Jersey RTK Hazardous Substance List:**

Toluene, CAS #108-88-3, Substance #: 1866, DOT #: 1294

**New York List of Hazardous Substances:**

Toluene, CAS #108-88-3, RQ-Air: 1000, RQ-Land: 1, Notes: None

**Pennsylvania Hazardous Substances List:**

Heptane, CAS# 142-82-5, Code: - (Basic Hazard)

Toluene, CAS #108-88-3, Code: E (Environmental Hazard)

**Washington Permissible Exposure Limits for Air Contaminants:**

Chemical Name	CAS #	TWA (ppm)	TWA (m g)	STEL (ppm)	STEL (m g)	Ceiling (ppm)	Ceiling (m g)	Skin
Heptane	142-82-5	400	1 600	500	2 000	--	--	--
Toluene	108-88-3	100	3 75	50	5 60	-	--	--

**Section 16 - Other Information**

**Prepared By:** Research & Development

**Revision Notes:** Section 8 – Revised limits for Heptane and Toluene.

**Additional Hazard Rating Systems:**

**Disclaimer:** The information contained in this document is based upon data that was supplied to Mule-Hide by other companies and organizations. No warranty of merchantability or fitness for a particular purpose is expressed or implied regarding the accuracy or completeness of the data and/or information in this material safety data sheet.