

**MATERIAL SAFETY DATA SHEET**

Mule Hide Products Co., Inc.  
 P.O. Box 1057  
 Beloit, WI 53512-1057  
 800-786-1492

Revised: April 2009

MSDS SHEET EPDM-013

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name</b>	Mule-Hide Single Seal Adhesive	<b>Supplier</b>	Mule-Hide Products Co., Inc.
<b>Chemical Name</b>	Mixture	<b>Address</b>	P.O. Box 1057
<b>Manufacturer</b>	Henkel Corporation		Beloit, WI 53512-1057
<b>Address</b>	9 Furman Hall Court Greenville, SC 29609		608-365-3111
<b>Phone</b>	864-232-3893		<a href="http://www.mulehide.com">www.mulehide.com</a>
<b>Internet</b>	<a href="http://www.henkel.com">www.henkel.com</a>		
<b>Emergency Phone</b>	800-424-9300 Chemtrec		
<b>MSDS Number</b>	EPDM-013		
<b>Effective Date</b>	October 16, 2000		
<b>NFPA Rating</b>	Health 2, Flammability 3, Reactivity 0 0-least, 1-slight, 2-moderate, 3-high, 4-extreme		

**SECTION 2 - PRODUCT INGREDIENTS**

Ingredient Name	Common Name	CAS Number	% Weight	Exposure Limit (OSHA)	Exposure Limit (NIOSH)	Exposure Limit (ACGIH)
Aliphatic Petroleum Distillate		64742-89-8	10-20	TWA 500 ppm	TWA 350mg/cum Ceiling 1800mg/cum 15-min	
Toluene (+)		108-88-3	50-60	TWA 200 ppm Ceiling 300 ppm*	TWA 100 ppm STEL 150 ppm	TWA 50 ppm
Ethylbenzene (+)		100-41-4	<1	TWA 100 ppm	TWA 100 ppm STEL 125 ppm	TWA 100 ppm STEL 125 ppm
Xylene (Mixed isomers) (+)		1330-20-7	1-5	TWA 100 ppm	TWA 100 ppm STEL 150 ppm	TWA 100 ppm STEL 150 ppm

**LEGEND:**

\* 500 ppm 10-min peak per 8-hour shift  
 (+) This chemical is subject to the reporting requirements of SARA Title III Section 313 and 40 CFR Part 372, and is potentially at the maximum concentration listed.

**SECTION 3 - PHYSICAL/CHEMICAL DATA**

Properties	Unit	Data
Appearance	N/A	Liquid
Boiling point	(Deg. F)	185.0 (Lower) 279.0 (Higher)
Evaporation Rate	(N-Butyl Acetate = 1)	4.000
Flash Point	deg F	N/A
Melting Point	(Deg. c~)	N/A
Odor	N/A	N/A
Ph (undiluted product)	N/A	N/A
Saturation in air	%	N/A
Solids Content	N/A	N/A
Specific gravity	g/cc	.940
Vapor Density	Air = 1	3.66
Vapor Pressure	(mm/hg @ 68F)	38.0
Viscosity	cP	N/A
VOC	lb/gl gm/l	5.555 665.65
Volatility	% Wt % Vol	73.8615 79.5081
Water solubility	%	Slight

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### SECTION 4 - FIRE AND EXPLOSION DATA

Material is extremely flammable, highly volatile and readily gives off vapors which are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Avoid open flames and other ignition sources in storage and in use, especially in spray applications.

This product should not be used where inadequate ventilation is likely or where vapor concentrations may become flammable.

The solids portion of the product (if applicable) is combustible and will decompose during combustion or under pyrolysis conditions giving off toxic fumes.

Closed containers may burst due to pressure build-up if exposed to temperatures at or near the boiling point of the product. Closed containers may rupture explosively, with product ignition, if exposed to extreme heat or fire.

Never use welding or cutting torch on or near drum (even empty) because product (even just residue can ignite explosively).

#### **Flammability Properties**

Flashpoint	12.0 F Seta
Lower Flammable Limit (STP in Air)	1.0%
Upper Flammable Limit (STP in Air)	8.2%
Auto-ignition Temperature	433.0 F

#### **Fire Extinguishing Media**

Dry chemical, carbon dioxide, foam, water spray or fog, and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on the size or potential size of the fire and circumstances related to the situation.

Dry chemical, carbon dioxide, and "multipurpose" foams are recommended. Water may be an ineffective extinguishing agent unless used under favorable conditions by experienced fire fighters trained in fighting all types of flammable liquid fires.

#### **Personal Protection for Fire Fighting**

Wear self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment.

Water may be used to keep fire-exposed containers cool to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat. Avoid spreading burning liquids with water used for cooling purposes. Fire protection and fire response strategy should be planned through consultation with local fire protection authorities or appropriate specialists.

### SECTION 5 - HAZARD IDENTIFICATION

#### **Toxicity:**

Follow all federal, state, and local regulations.

#### **Routes and Effects of Exposure:**

##### **Eyes**

Can cause irritation. Symptoms may include stinging, burning, tearing, redness, and swelling.

##### **Skin**

Can cause irritation. Symptoms may include redness, burning, drying, inflammation (dermatitis), and burns. Material may be absorbed through the skin in harmful amounts from prolonged contact.

##### **Inhalation**

Can cause irritation of nose, throat, and airways. High concentrations may cause central nervous system depression with symptoms of dizziness, headache, nausea, and confusion.

##### **Ingestion**

Can cause irritation of the mouth, throat, and gastrointestinal tract. Symptoms may include nausea, vomiting, and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal.

Extremely flammable liquid and vapors. Vapors can cause flash fire. Keep away from heat, sparks, flames, and other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment). Can cause eye, skin, and respiratory tract irritation. Overexposure can cause central nervous system depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. Use ventilation adequate to keep exposures below legal and recommended exposure limits (see section 2). Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Wash thoroughly after handling. Toxic fumes are released in fire situations. Contain spilled liquid to prevent contamination of soil, surface water or ground water.

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### SECTION 5 - HAZARD IDENTIFICATION (CONT)

Reports have associated repeated and prolonged occupational overexposure to organic solvents with various neurotoxic effects including permanent brain and nervous system damage. Symptoms include loss of memory, loss of intellectual ability and loss of coordination. Chronic skin exposure to solvents may cause similar effects. Intentional misuse by deliberately concentrating and inhaling the contents of this product may be harmful or fatal.

Overexposure to toluene has been suggested as a cause of the following effects in humans: cardiac sensitization, kidney damage, and liver damage. Pre-existing disorders of the following organs (or organ systems) may be aggravated by exposure to toluene: respiratory tract, kidney, central nervous system, and auditory system. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of toluene.

Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies reveal that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

Overexposure to xylene / ethylbenzene has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, cardiac sensitization, and effects on hearing and kidney damage. Xylene / ethylbenzene (or a component) has been shown to cause birth defects in laboratory animal studies. The relevance of these findings to humans is uncertain. Pre-existing disorders of the following organs (or organ systems) may be aggravated by exposure to this material: kidney, auditory system. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations. Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain.

### SECTION 6 - FIRST AID PROCEDURES

#### **Inhalation**

Remove individual to fresh air. If breathing is difficult administer oxygen. If breathing has stopped begin artificial respiration. Seek immediate medical attention.

#### **Skin Contact**

Wash exposed skin area with soap and water. Consult physician if irritation persists. Launder contaminated clothing before reuse.

#### **Skin Absorption**

Not applicable

#### **Ingestion**

Do not induce vomiting. Seek immediate medical attention.

#### **Eye Contact**

Flush eyes gently with water for at least 15 minutes while holding eyelids apart. Consult physician.

### SECTION 7 - STABILITY/REACTIVITY DATA

#### **Stability**

Stable under normal conditions of temperature and pressure.

#### **Conditions to Avoid**

Avoid exposure to heat, sparks, open flames, and other ignition sources, which induce combustion and/or thermal decomposition.

#### **Incompatibilities:**

Avoid contact with strong acids (mineral acids) and strong oxidizing agents.

#### **Decomposition:**

Hazardous combustion and decomposition products:

Carbon monoxide and carbon dioxide, acrid (choking) smoke and fumes, hydrogen chloride, various hydrocarbons, other unidentified organic compounds and toxic substances.

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### SECTION 8 - HANDLING, USE, AND DISPOSAL

#### **Procedures for Spills/Leaks**

Eliminate all ignition sources such as flames (including pilot lights), electrical sparks, etc. Stop spill at source. Contain spilled liquid with sand, earth, vermiculite or other inert absorbent material. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and other bodies of water. If runoff occurs notify authorities as required.

Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Depending on the size of the spill, pump or vacuum, transfer spilled product to clean container for recovery and transfer contaminated absorbent to appropriately marked waste container for disposal.

#### **Handling**

Handle with reasonable care. Avoid breathing vapors and spray mist. Avoid eye contact and repeated or prolonged skin contact. When opening containers, remove top slowly to relieve any pressure build-up. When dispensing from container, follow acceptable static grounding/bonding procedures for flammable liquids. Do not transfer product to unmarked container. For industrial use only.

Containers of this material may be hazardous when emptied. Because emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Empty drums should be completely drained and properly returned to a drum reconditioned or properly disposed of.

Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignition without the presence of obvious ignition sources. Published "auto ignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions.

Any proposed use of this product in elevated temperature processes or in spray applications should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

#### **Storage**

Keep product containers cool, dry, and away from sources of ignition. Use and store this product with adequate ventilation. Keep product containers tightly closed when not in use. Product may corrode, degrade, or otherwise react with some metals and plastics upon prolonged contact. Consult with equipment supplier for proper construction materials for storage tanks, mixers, fittings, pipes and other storage and handling equipment.

#### **Waste Disposal Method**

Do not discharge to streams, lakes, ponds or sewers. Dispose of in accordance with all applicable federal, state or provincial, and local laws and regulations. RCRA hazardous material 40 CFR PART 260 et. Seq.

### SECTION 9 - EXPOSURE CONTROL/PERSONAL PROTECTION

#### **Eye**

Chemical splash goggles are advised. Consult with safety representative. Readily accessible eyewash stations and safety showers in work areas are recommended.

#### **Ventilation**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure limit(s).

#### **Respiratory**

If the TLV or PEL for the product or any component is exceeded in the workplace air (see Section 2), A NIOSH/OSHA approved respirator is advised. Engineering controls should be implemented to reduce exposure.

#### **Protective Clothing**

Wear resistant gloves (consult with safety equipment supplier). If necessary, wear impervious clothing and boots.

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### SECTION 10 - TRANSPORTATION

#### **Shipping Name**

Adhesive

#### **Labeling**

Flammable liquid

#### **Labeling Required**

#### **Hazard Class**

DOT Hazard Class: 3

DOT Packaging Group: PGII, UN1133

### SECTION 11 - MISCELLANEOUS INFORMATION

#### **Special Comment**

Practice safe working procedures and good personal hygiene. Use protective equipment when necessary. Wash thoroughly after handling and before eating, drinking, smoking, or using toilet facilities.

Safety glasses and impervious gloves are recommended as a MINIMUM. It is the responsibility of the user to determine the personal protective equipment appropriate for each use of the product.

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:

**WARNING:** This product contains a chemical(s) known to the state of California to cause cancer.

**WARNING:** This product contains a chemical(s) known to the state of California to cause birth defects and/or other reproductive harm.

#### **Additional Information**

Contact Mule-Hide at 608-365-3111

#### **MSDS Revision Summary**

Revision Date        April 1, 2004

Reason for Change    New format

#### **Disclaimer**

The responsibility to provide a safe workplace is with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and to develop work practices and procedures for a safe environment.

The information herein has been compiled from sources believed to be reliable, and is accurate to the best of our knowledge. However, Mule-Hide Products Co., Inc. cannot give any guarantees regarding information from other sources, and expressly does not make any warranties, nor assume any liability for its use.

This is the end of MSDS