

Material Safety Data Sheet

Product Name: Mule-Hide PVC Membrane Cleaner

MSDS No. 10-3110

Date of Preparation: 09/15/2008

Revision: 004

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: PVC Membrane Cleaner **General Use:** Cleaning Solution for Weathered PVC Membrane
Supplier: Mule-Hide Products Co., Inc., P.O. Box 1057, Beloit, WI 53512 Phone: 800-786-1492
Manufacturer: Carlisle SynTec Incorporated, P.O. Box 7000, 1295 Ritner Hwy, Carlisle, PA, 17013-0925 (717) 245-7000
Chemtrec (800) 424-9300

Section 2 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Danger – Highly flammable liquid and vapor
Warning – Causes skin irritation
Warning – Causes serious eye irritation
Danger – May be fatal if swallowed and enters airways
Warning – May cause an allergic skin reaction
Warning – May cause respiratory irritation

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†Sec. 8

Potential Health Effects

Eye: Exposure can cause eye irritation. Symptoms may include stinging, tearing, redness and swelling.

Skin: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking, and skin burns. Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

Swallowing: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

Inhalation: Exposure to vapor or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits.

Symptoms of Exposure: Mouth and throat irritation, gastrointestinal irritation (nausea, vomiting, diarrhea), irritation (nose, throat, respiratory tract), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), central nervous system (CNS) depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other CNS effects, high blood sugar, coma.

Target Organ Effects: This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: mild, reversible liver effects, mild, reversible kidney effects.

Developmental Information: This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information: No data

Other Health Effects: No data

Primary Route(s) of Entry: Inhalation, Skin absorption, Skin contact, Eye contact

Section 3 – Ingredient Information

| Hazardous Ingredients | CAS Number | % wt |
|------------------------|------------|------|
| Acetone | 67-64-1 | 100% |
| Additional Ingredients | CAS Number | % wt |
| | | |

Section 4 - First Aid Measures

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing: Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with the head down. Seek medical attention. If possible, do not leave individual unattended.

Inhalation: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians: This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

Section 5 - Fire-Fighting Measures

Flash Point: -4°F (-20°C)

Flash Point Method: Closed Cup

Autoignition Temperature: 465°C (869°F)

LEL: 2.6%

UEL: 12.8%

Flammability Classification: Flammable Liquid

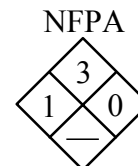
Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical.

Unusual Fire or Explosion Hazards: Material is highly volatile and readily gives off vapors which may travel along the ground or 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 the material handling point. Never use welding or cutting torch on or near can (even empty) because product (even just residue) can ignite explosively.

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

Fire-Fighting Instructions:

Fire-Fighting Equipment: Water may be ineffective. Water may be used to keep fire-exposed containers cool until fire is out. Wear a 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. Refer to the personal protective equipment section of this MSDS.



Section 6 - Accidental Release Measures

Small Spills: Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spills: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from the area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Section 7 - Handling and Storage

Handling Precautions: 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 the data sheet must be observed. All five-gallon pails and larger metal containers should be grounded and/or bonded when material is transferred. Warning. 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 ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Section 8 - Exposure Controls / Personal Protection

Hazardous Ingredients:

| Ingredient | OSHA PEL | | ACGIH TLV | | NIOSH REL | | NIOSH IDLH |
|------------|----------|----------|-----------|---------|-----------|-------------|------------|
| | TWA | STEL | TWA | STEL | TWA | STEL | |
| Acetone | 1000 ppm | 1000 ppm | 500 ppm | 750 ppm | 250 ppm | None estab. | 2500 ppm |
| | | | | | | | |

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Eye Protection: Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection: Permeation resistant gloves (that meet ANSI/ISEA 105-2005) recommended. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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: Clear, colorless, volatile liquid
Appearance and Odor: Characteristic sweetish odor
Odor Threshold(ppm): 100 ppm
Vapor Pressure: 181 mm of Hg (@20°C/68°F)
Vapor Density (Air=1): 2
Formula Weight: 58.1 Molecular Weight
Density: 6.590 lbs/gal @ 68°F (20°C)
Specific Gravity (H₂O=1, at 4°C/39°F): 0.79
pH: 7
VOC (gpl): VOC Exempt

Water Solubility: Complete
Other Solubilities: Easily Soluble in methanol and diethyl ether.
Boiling Point(°C): 56.1 (133°F)
Freezing/Melting Point(°C): -95.4 (-139.6°F)
Viscosity: N/A
Refractive Index: N/A
Surface Tension: N/A
% Volatile: 100
Evaporation Rate: 11.6 (Butyl Acetate = 1)
Flash Point: -4°F (-20°C)
Flash Point Method: Closed Cup
Autoignition Temperature: 465°C (869°F)
LEL: 2.6%
UEL: 12.8%

Section 10 - Stability and Reactivity

Stability: Stable.

Possibility of Hazardous Reactions: Will not occur.

Chemical Incompatibilities: Avoid contact with acids, strong oxidizing agents.

Conditions to Avoid: Avoid heat, sparks and open flame

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

Toxicity Data: No Data

Section 12 - Ecological Information

Ecotoxicity: Not Determined

Environmental Fate: Not Determined

Environmental Degradation: Not Determined

Soil Absorption/Mobility: Not Determined

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: Acetone
Shipping Symbols: (3)
Hazard Class: Flammable (3)
ID No.: UN1090
Packing Group: II
Label: 3
Special Provisions (172.102):
 IB2, T4, TP1

Packaging Authorizations
a) Exceptions: 173.150
b) Non-bulk Packaging: 173.202
c) Bulk Packaging: 173.242

Quantity Limitations
a) Passenger, Aircraft, or Railcar: 5 liters
b) Cargo Aircraft Only: 60 liters

Vessel Stowage Requirements
a) Vessel Stowage: B
b) Other: ---

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)
 RCRA Hazardous Waste Classification (40 CFR 261): D001
 CERCLA Hazardous Substance (40 CFR 302.4): Acetone
 CERCLA Reportable Quantity (RQ), 5000 lbs.
 SARA 311/312 Codes: Hazard Class – 40 CFR 370.2 Immediate (X) Delayed (X) Fire (X) Reactive ()
 Sudden Release of Pressure ()

SARA Toxic Chemical (40 CFR 372.65): Not listed
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed
 OSHA Specifically Regulated Substance (29CFR 1910.106)

State Regulations: California Proposition 65: This product contains the following chemical(s) known to the state of California to cause birth defects or other reproductive harm:

New Jersey RTK– Acetone 67-64-1
 Pennsylvania RTK – 2-Propanone 67-64-1

Section 16 - Other Information

Prepared By: Research & Development

Formatting Changes: Section 8- Revised limits for Acetone.

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