

Safety Data Sheet

Material Name: Low-VOC Membrane Cleaner

SDS 10-3107

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

Low-VOC Membrane Cleaner

Chemical Family

Cleaner

Product Use

Clean EPDM and TPO membranes

Restrictions on Use

For Industrial Use Only

Manufacturer Information

Carlisle SynTec
1285 Ritner Highway
Carlisle, PA 17013 USA
Phone: +1-800-479-6832
Emergency Phone #: +1-800-424-9300 (CHEMTREC)

Supplier Information:

Mule-Hide Products Co., Inc.
1195 Prince Hall Drive
Beloit, WI 53511 USA
Phone: 800-786-1492

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Flammable Liquids - Category 2

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Specific Target Organ Toxicity -Single Exposure -Category 2(respiratory system, nervous system, kidney, blood, liver)

Specific Target Organ Toxicity -Single Exposure -Category 3

GHS Label Elements

Symbol(s)



Signal Word

Danger



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Hazard Statement(s)

Highly flammable liquid and vapor
Causes skin irritation
Causes serious eye irritation
May cause damage to organs
May cause respiratory irritation. May cause drowsiness or dizziness

Precautionary Statement(s)

Prevention

Keep container tightly closed
Keep away from heat/sparks/open flame/hot surfaces - No smoking
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Take precautionary measures against static discharge
Use only non-sparking tools
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling
Do not eat, drink or smoke when using this product

Response

In case of fire: Use appropriate media to extinguish
Collect spillage
If exposed: Call a POISON CENTER or doctor/physician
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Call a POISON CENTER or doctor if you feel unwell
Specific treatment (see label)

Storage

Store in a well-ventilated place. Keep container tightly closed
Keep cool
Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.



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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
67-64-1	Acetone	68.5-71.5
98-56-6	PCBTF	29-31

Section 4 - FIRST AID MEASURES

Inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Skin

Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Take off contaminated clothing and wash before reuse.

Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

If ingested, get immediate medical attention.

Most Important Symptoms/Effects

Acute

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to respiratory system, nervous system, kidney, blood, liver.

Delayed

No information on significant adverse effects.

Section 5 - FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use regular dry chemical, foam, or carbon dioxide.

Unsuitable Extinguishing Media

Water may be ineffective. Do not use high-pressure water streams.

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Special Hazards Arising from the Chemical

Highly flammable liquid and vapor. May be ignited by heat, sparks or flames. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive.

Hazardous Combustion Products

Toxic gases: carbon monoxide, carbon dioxide

Firefighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in fire.

Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Remove all sources of ignition. Avoid breathing vapors. Use appropriate protective equipment including self-contained breathing apparatus. Ventilate area. Use non-sparking tools and equipment. Flammable liquid. Runoff may create fire or explosion hazard. A vapor suppressing foam may be used to reduce vapors. Eliminate all sources of ignition. All equipment used when handling the product must be grounded. Stop leak if this can be done without risk. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, basements, or confined areas. Absorb with earth, sand or other non-combustible material and transfer to container. Use non-sparking tools during clean-up. Large spills: Keep unnecessary people away, isolate hazard area and deny entry. Prevent entry into waterways, sewers, basements, or confined areas. Dike far ahead of liquid spill for collection and later disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Run-off to sewer may create a fire hazard. Use clean non-sparking tools to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal. Comply with all applicable regulations on spill and release reporting.

Environmental Precautions

Avoid release to the environment.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Runoff to sewer may cause a fire or explosion hazard. Do not handle or store near an open flame, heat or other sources of ignition. Keep container tightly closed. Ground/Bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof



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electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Do not breathe vapor. Use only with adequate ventilation. Use personal protection equipment. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not store near food, drink, or tobacco products. **KEEP OUT OF REACH OF CHILDREN.**

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store locked up.

Store in accordance with all current regulations and standards. Keep away from sources of ignition.

Ground/Bond container and receiving equipment. Store in a well-ventilated flammable liquid storage area or cabinet.

Incompatible Materials

Strong acids, alkalies, oxidizing agents, liquid chlorine, oxygen

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Acetone	67-64-1
ACGIH:	250 ppm TWA
	500 ppm STEL
NIOSH:	250 ppm TWA 590 mg/m ³ TWA
	2500 ppm IDLH (10% LEL)
Europe:	500 ppm TWA 1,210 mg/m ³ TWA
OSHA (US):	1,000 ppm TWA 2,400 mg/m ³ TWA
Mexico:	1,000 ppm TWA LMPE-PPT 2,400 mg/m ³ TWA LMPE-PPT
	1,260 ppm STEL [LMPE-CT] 3,000 mg/m ³ STEL [LMPE-CT]

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

There are no biological limit values for any of this product's components.

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ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

Acetone (67-64-1)

25 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)

Engineering Controls

Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses or goggles are recommended when there is a potential for eye contact. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid	Physical State	liquid
Odor	Not available	Color	colorless
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	56.1 - 139.3 °C
Freezing point	Not available	Evaporation Rate (butyl acetate=1)	4.68
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Auto ignition Temperature	465 °C	Flash Point	-17.8 °C (0°F)

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Lower Explosive Limit	0.9	Decomposition temperature	Not available
Upper Explosive Limit	12.8	Vapor Pressure	131.09 mmHg
Vapor Density (air=1)	3.26	Specific Gravity (water=1)	Not available
Water Solubility	(Soluble)	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	0.955	Molecular Weight	Not available

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal conditions of use.

Possibility of Hazardous Reactions

Will not occur.

Conditions to Avoid

Keep away from heat, sparks, open flame and other ignition sources.

Incompatible Materials

Strong acids, alkalis, oxidizing agents, liquid chlorine, oxygen

Hazardous decomposition products

Toxic gasses: carbon monoxide, carbon dioxide

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause respiratory irritation. May cause drowsiness or dizziness.

Skin Contact

Causes skin irritation.

Eye Contact

Causes serious eye irritation.



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Ingestion

No information on significant adverse effects.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Acetone (67-64-1)

Oral Rat 5800 mg/kg LD50

Dermal Guinea pig >7426 mg/kg LD50

Inhalation LC50 Rat 50100 mg/m³ 8 h

PCBTF (98-56-6)

Oral Rat 13000 mg/kg LD50

Dermal LD50 Rabbit >2 mL/kg (death occurred (1 female rabbit))

Inhalation LC50 Rat 33 mg/l LC50

Immediate Effects

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to respiratory system, nervous system, kidney, blood, liver. May cause irritation and damage.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity Data

Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

No information available for the product.

Component Carcinogenicity

Acetone	67-64-1
ACGIH:	A4 - Not Classifiable as a Human Carcinogen

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic Data

No information available for the product.

Reproductive Toxicity

No information available for the product.

Specific Target Organ Toxicity - Single Exposure

Respiratory system, nervous system, kidney, blood, liver



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Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

Aspiration hazard

No information available for the product.

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

Acetone	67-64-1
Fish:	Fish LC50 96 hr. LC50 Oncorhynchus mykiss 5540 mg/l (static); Fish LC50 96 hr. LC50 Lepomis macrochirus 8300 mg/l (static)
Algae:	EC50 336 hr. Chlorella pyrenoidosa 3020 mg/l
Invertebrate:	LC50 48 hr. Daphnia magna 12600 - 12700 mg/l
PCBTF	98-56-6
Fish:	Fish LC50 96 hr. LC50 5.6 mg/l
Invertebrate:	EC50 48 h Daphnia magna 3.68 mg/L IUCLID

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations. Subject to Disposal regulations. U.S. EPA 40 CFR 262. Hazardous Waste Number(s):D001

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: FLAMMABLE LIQUIDS, N.O.S., (Contains: Acetone)

Hazard Class: 3

UN/NA #: UN1993

Packing Group: II



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Required Label(s): 3

Additional information: DOT 49 CFR 172.101

IATA Information:

Shipping Name: FLAMMABLE LIQUID, N.O.S., (Contains: Acetone)

Hazard Class: 3

UN#: UN1993

Packing Group: II

Required Label(s): 3

Additional information: DOT 49 CFR 172.101

IMDG Information:

Shipping Name: FLAMMABLE LIQUID, N.O.S., (Contains: Acetone)

Hazard Class: 3

UN#: UN1993

Packing Group: II

Required Label(s): 3

TDG Information:

Shipping Name: FLAMMABLE LIQUID, N.O.S., (Contains: Acetone)

Hazard Class: 3

UN#: UN1993

Packing Group: II

Required Label(s): 3

Additional information: DOT 49 CFR 172.101

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Acetone	67-64-1
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
PCBTF	98-56-6
TSCA 12b:	Section 4 , 1 % de minimus concentration

SARA Section 311/312 (40 CFR 370 Subparts B and C)



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Acute Health: Yes Chronic Health: No Fire: Yes Pressure: No Reactivity: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes

Not listed under California Proposition 65

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Acetone	67-64-1
	1 %

Component Analysis - Inventory

Acetone (67-64-1)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes

PCBTF (98-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



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Summary of Changes

New SDS: 2/23/2016

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory, EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law, JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory, KECL - Korea Existing Chemicals List, KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act, TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use