

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

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## Section 1 – PRODUCT AND COMPANY IDENTIFICATION

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**Material Name:** TPO Low-VOC Cut-Edge Sealant

**Synonym:** Industrial Sealant

**Chemical Family:** Solvent Based Sealant

**Product Use:** Sealant for TPO Single-Ply Roofing 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

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## Section 2 – HAZARDS IDENTIFICATION

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

Flammable liquids – Category 2

Serious eye damage/ eye irritation – Category 2A

Specific target organ toxicity – single exposure central nervous system, narcotic effect, respiratory system – Category 3

Skin corrosion/irritation – Category 2

Toxic to reproduction – Unborn child – Category 2

Specific target organ toxicity – repeated exposure – Category 2

Aspiration hazard – Category 1

### GHS Label Elements

#### Symbol(s)



### Signal Word

Danger

### Hazard Statement(s)

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H355 May cause respiratory irritation.

H361 Suspected of damaging unborn child.



# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

H373 May cause damage to organs through prolonged or repeated exposure.

## Precautionary Statement(s)

### Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe mist, spray, vapors.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash hands, forearms, exposed areas thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection

### Response

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/physician
- P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire; use water spray, carbon dioxide, dry chemical or alcohol foam for extinction.

### Storage

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.

### Disposal

- P501 Dispose of contents/container in accordance with all federal, state, and local health and environmental regulations, all applicable federal, state, and local health and environmental regulations.

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## Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

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CAS	Component Name	Percent
98-56-6	Parachlorobenzotrifluoride	66-71
69430-35-9	Hydrocarbons, C6-20, polymers hydrogenated	8-11

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

108-88-3	Toluene	6-8
66070-58-4	Styrene-ethylene/butylenes-styrene polymer	5-7
68648-89-5	Styrene-ethylene/propylene-(styrene) polymer	4-5
9011-11-4	Hydrocarbon polymer	3-4

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## Section 4 – FIRST AID MEASURES

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### General

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. (show the label where possible).

### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if not breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

### Skin

Rinse skin with water/shower. Remove/take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash clothing before reuse. If skin irritation or rash occurs: wash with plenty of soap and water. Get medical attention.

### Eye

Immediately flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If easy to do remove contact lenses. Washing eyes within several seconds is essential to achieve maximum effectiveness. If irritation persists seek medical attention.

### Ingestion

Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person

### Most important symptoms and effects, both acute and delayed

May irritate and cause redness and pain. Causes serious eye irritation. Can cause central nervous system depression. Vapors have a narcotic effect and may cause fatigue, dizziness and nausea.

### Signs and symptoms of overexposure

#### Eyes

Adverse symptoms may include the following: pain or irritation, watering, redness.

#### Inhalation

Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

#### Skin

Adverse symptoms may include the following: irritation, redness.

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

## Ingestion

Adverse symptoms may include the following: nausea or vomiting. Breathing or swallowing of large amounts may cause liver and kidney damage.

## Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

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## Section 5 – FIREFIGHTING MEASURES

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### Extinguishing Media

#### Suitable extinguishing media

Water spray, carbon dioxide, dry chemical, alcohol foam.

#### Unsuitable extinguishing media

Solid water stream – may spread fire.

#### Special hazards arising from the substance or mixture

Vapors may cause a flash fire or ignite explosively. Vapors may travel a considerable distance to a source of ignition and flashback. Prevent buildup of vapors or gases to explosive concentrations. Runoff to sewer may create fire or explosion hazard. Water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

#### Advice for Firefighters

#### Hazardous combustion products

Carbon dioxide, carbon monoxide

#### Protective equipment

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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## Section 6 – ACCIDENTAL RELEASE MEASURES

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### Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Immediately evacuate personnel to safe areas. Keep people away and upwind of spill/leak. Remove all sources of ignition.

### Environmental precautions

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.

### Methods and material for containment or cleaning up

Absorb with liquid-binding material (ie. Sand, diatomite, dry earth, acid binders, or other non-combustible material). Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

### Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

See Section 13 for disposal information.

## Section 7 – HANDLING AND STORAGE

### Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.

### Information about protection against explosions and fire

Keep ignition sources away – Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.

### Conditions for safe storage, including any incompatibilities storage

#### Requirements to be met by storerooms and receptacles

Store in a cool location.

#### Information about storage in one common storage facility

Not required.

#### Further information about storage conditions

Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.

#### Specific end use(s)

No further relevant information available.

## Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component exposure limits

<b>Toluene</b>	108-88-3	
OSHA (US):	200 ppm TWA	300 ppm CEIL
ACGIH:	20 ppm TWA	

### Ingredients with biological limit values

None known.

### Additional information

Not available

### Exposure controls

#### Engineering measures

Good general ventilation (typically 10 air changes/hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

#### Individual Protection Measures, such as Personal Protective Equipment

#### General protective and hygienic measures

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.

**Hand protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Select the glove material based on penetration times, rates of diffusion and degradation.

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

**Eye protection**

Wear safety glasses with side shields or tightly sealed goggles. Wear a respirator if needed.

**Section 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Liquid	<b>Physical State</b>	Clear liquid
<b>Odor</b>	liquid naphthalenic to, pleasant, acetone-like	<b>Color</b>	Clear
<b>Odor Threshold</b>	Not determined	<b>pH</b>	Not available
<b>Melting Point</b>	Not determined	<b>Boiling Point/Range</b>	139°C (228°F)
<b>Freezing point</b>	Not determined	<b>Evaporation Rate</b>	2 ( n-Butyl acetate =1)
<b>Autoignition</b>	Not determined	<b>Flammability (solid, gas)</b>	Not applicable
<b>Ignition temperature</b>	480°C (896°F)	<b>Flash Point</b>	4°C (40°F)
<b>Lower Explosive Limit</b>	0.9%	<b>Decomposition</b>	Not determined
<b>Upper Explosive Limit</b>	10.5%	<b>Vapor Pressure</b>	40hPa (5.3 mm Hg)
<b>Vapor Density (air=1)</b>	Not determined	<b>Specific Gravity (water=1)</b>	Not determined

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant****SDS 10-3407**

<b>Water Solubility</b>	Not determined	<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Viscosity</b>	Not determined	<b>Solubility (Other)</b>	Not determined
<b>Density</b>	1.20 g/cm <sup>3</sup> (10.02 lbs/gal)	<b>VOC</b>	235 g/l

**Other Information**

No additional information available.

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**Section 10 – STABILITY AND REACTIVITY**

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**Reactivity**

Stable under normal conditions. Possible corrosive vapors. Reacts with oxidizers.

**Chemical Stability****Thermal decomposition/conditions to be avoided**

No decomposition under normal use conditions.

**Possibility of hazardous reactions**

No dangerous reactions known expected.

**Conditions to avoid**

Heat, sparks and flames.

**Incompatible Materials**

Strong acids, strong alkalis, amines, ammonia, chloroform, copper, copper alloys, halogenated compounds, isocyanates, and strong oxidizing agents.

**Hazardous decomposition products**

Carbon dioxide, carbon monoxide, toxic fumes chlorine and fluorine containing gases can be produced.

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**Section 11 – TOXICOLOGICAL INFORMATION**

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**Acute and Chronic Toxicity****Acute toxicity****Component Analysis - LD50/LC50**

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

## PCBTF (98-56-6)

Oral LD50 Rat 6.8 g/kg

Dermal LD50 Rabbit &gt;2.7 g/kg

Inhalation LC50 Rat &gt;4479 ppm

## Toluene (108-88-3)

Inhalation LC50 Rat &gt;20 mg/l 4h

Dermal LD50 Rabbit 12,267 mg/kg

Oral LD50 Rat (male) 5,580 mg/kg

Oral TDLo Rat 1,000 mg/kg

# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

**Primary irritant effect**

**Skin**

Causes mild skin irritation.

**Eyes**

Causes serious eye irritation.

**Sensitization**

Not expected to be a sensitizer.

**Mutagenicity**

No known significant effects or critical hazards.

**Component Carcinogenicity**

<b>Toluene</b>	108-88-3
IARC:	3

**Reproductive toxicity**

Not classified. Based on available data, the classification is not met.

**Specific target organ toxicity (single exposure)**

May cause drowsiness or dizziness.

**Specific target organ toxicity (repeated exposure)**

May cause damage to organs through repeated or prolonged exposure.

**Aspiration hazard**

May be harmful if swallowed and enters airways.

**Potential adverse human health effects and symptoms**

Harmful if swallowed. Harmful in contact with the skin. Harmful if inhaled. Based on available data, the classification criteria are not met.

**Symptoms/injuries after inhalation**

Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.

**Symptoms/injuries after skin contact**

Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.

**Symptoms/injuries after ingestion**

Swallowing a small quantity of this material will result in serious health hazard.

**Section 12 – ECOLOGICAL INFORMATION**

**Component Analysis - Aquatic Toxicity**

<b>Parachlorobenzotrifluoride</b>	98-56-6
Fish:	LC50 13.5 mg/l (Rainbow trout) 96 h LC50 12.0 mg/l (Bluegill sunfish) 96 h MATC >0.54<1.4 mg/l (Fathead minnow) 31 day (Triethylene glycol used as solvent carrier). BCF 121.8 & 202.0 (Bluegill sunfish) 48 h



# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

	LC50 12.4 mg/l (Water flea) 48 h MATC >0.03<0.05 mg/l (Water flea) 21 day
Algae:	IC 50 500 ml/l (Green & Blue-green algae) 72 h
<b>Toluene</b>	108-88-3
Fish:	EC50 443 ppm (Skeletonema costatum) marine water 96 h acute EC50 12500 ug/l (Pseudokirchneriella subcapitata) fresh water 72 h acute EC50 11600 ug/l (Gammarus pseudolimnaeus adult) fresh water 48h acute EC50 6000 ug/l (Daphnia magna – juvenile(fledging, hatchling, weanling) fresh water 48h LC50 5500 ug/l (Oncorhynchus kisutch – fry) fresh water 96 h acute NOEC 500000 ug/l (Pseudokirchneriella subcapitata) fresh water 96 h chronic NOEC 1000 ug/l (Daphnia magna) fresh water 21 days chronic

## Persistence and degradability

### 98-56-6 parachlorobenzotrifluoride

Atmospheric lifetime: estimated to be 65.9 days for OH radical reaction, LogKow 3.7, Koc 420-530, Water sol. @ 23°C 29.1. Parachlorobenzotrifluoride will preferentially partition to the atmosphere, due to its high volatility. It has been estimated that 99.93% of 100Kg spill would end up in the atmosphere, while only 0.06% would partition to water.

### 108-88-3 toluene

Readily biodegradable Log Pow 2.73, BCF 8.3, Potential low

## Other adverse effects

No further relevant information available.

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## Section 13 – DISPOSAL CONSIDERATIONS

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### Waste treatment method

Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Comply with applicable federal, state, and local regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

### Uncleaned packaging

Disposal must be made according to official regulations.

### RCRA toxic hazardous waste “U” list

108-88-3 toluene listed U220 reference no.



# SAFETY DATA SHEET

**Material Name: TPO Low-VOC Cut-Edge Sealant**

**SDS 10-3407**

## Section 14 – TRANSPORT INFORMATION

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**US DOT Information:**

**Shipping Name:** Adhesives, containing a flammable liquid

**Hazard Class:** 3

**UN/NA #:** UN1133

**Packing Group:** II

**Required Label(s):** 3

**Marine pollutant:** No

**Special precautions for user:** Warning: Flammable liquids

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
Not applicable.

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## Section 15 – REGULATORY INFORMATION

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**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SARA Section 304 Extremely Hazardous Substances Reportable quantity(RQ):**

None

**SARA Section 302 Threshold Planning Quantity (TPQ):**

None

**SARA Section 311 (Clean Water Act)**

108-88-3 toluene

**SARA Section 313 (Specific toxic chemical listings)**

108-88-3 toluene

**TSCA (Toxic Substance Control Act)**

108-88-3 toluene

**IARC (International Agency for Research on Cancer)**

None

**NTP (National Toxicology Program)**

None

**California Proposition 65**

**Carcinogens list:** None

**Developmental toxicity:** No components listed

**Reproductive toxicity:** 108-88-3 toluene

**No significant risk level (NSRL):** no data

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## Section 16 – OTHER INFORMATION

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**Summary of Changes**

New SDS: September 13, 2016

**Key / Legend**



# SAFETY DATA SHEET

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**SDS 10-3407**

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; 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; JP - Japan; Kow - Octanol/water partition coefficient; 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; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

## Other Information

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