



MANUALS for  
MATERIALS &  
SAFETY  
+SDS

(Safety Data Sheets)

# Safety Data Sheet



## Section 1 - Product and Company Identification

**Material Name** \* APOC 296 TPO Primer  
**Product Code** \* AP-2965  
**Product Description** \* Clear/Amber Liquid.  
**Product Use** \* Roof Primer  
**Synonyms** \* Elastomeric Bonding Primer

**Manufacturer** \* Gardner Gibson, Inc.  
4701 E. 7<sup>th</sup> Ave.  
Tampa, FL 33605  
United States  
www.gardner-gibson.com  
Please use "Contact Us" form on the website

**Telephone**  
**Technical** \* 813-248-2101  
**Emergency** \* 800-424-9300  
**Emergency** \* 703-527-3887

**Preparation Date** \* 7/18/2016  
**Last Revision Date** \* 7/18/2016

## Section 2 - Hazards Identification

### Emergency Overview

#### WARNING

Flammable Liquid and Vapor. Contains Combustible Petroleum Distillates. Keep away from heat, sparks, and open flame. Keep container tightly closed when not in use. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage. May cause skin and eye irritation. Harmful or Fatal if swallowed. Use safety glasses, gloves, and skin protection when using this product. Protect building fresh air inlets from product vapors. Do not use in drinking water or food systems. Dispose in accordance to Federal, State, and local regulations. Do not reuse empty container.

**Prevention** Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash thoroughly after handling. Keep away from open flame.

**Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

**Storage/Disposal** Store in a closed container. Do not allow product to freeze. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



CAUTION - May cause eye and skin irritation on contact.

<b>Physical Form</b>	* Liquid
<b>Color</b>	* Clear/Amber Liquid.
<b>Odor</b>	* Paint-Like Odor.
<b>Flash Point</b>	* 80° F (27° C)
<b>OSHA (HCS2012)</b>	* Skin Corrosion/Irritation - Category 3, Serious Eye Damage, Eye Irritation - Category 2A, Flammable Liquids – Category 3
<b>WHMIS</b>	* Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B



\*

<b>NFPA:</b>	HEALTH HAZARD = 2	FIRE HAZARD = 3	REACTIVITY = 0
<b>HMIS:</b>	HEALTH HAZARD = 2	FIRE HAZARD = 3	REACTIVITY = 0

**Potential Health Effects**

**Inhalation**

- Acute (Immediate)** \* Inhalation of vapors or mists may cause central nervous system depression, light-headedness, headache, nausea and loss of coordination.
- Chronic (Delayed)** \* Under normal conditions of use, no health effects are expected.

**Skin**

- Acute (Immediate)** \* May cause irritation.
- Chronic (Delayed)** \* Repeated and prolonged exposure to the skin may cause dermatitis.

**Eye**

- Acute (Immediate)** \* Likely to cause eye irritation, burning, tearing, etc. on contact with the eyes. If swelling and irritation persist, seek medical attention.
- Chronic (Delayed)** \* Direct contact may cause slight to moderate irritation.

**Ingestion**

- Acute (Immediate)** \* May cause irritation. May affect the nervous system. May be harmful or fatal if swallowed.
- Chronic (Delayed)** \* Repeated and prolonged exposure may cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

**Carcinogenic Effects**

	CAS	IARC	NTP

### Section 3 - Composition/Information on Ingredients

Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Xylene	CAS # - 1330-20-7	>20.0%	Ingestion/Oral-Rat LD50 - 5000 mg/kg		
PCBTF (Oxsol 900)	CAS # - 98-56-6	>60.0%	Ingestion/Oral-Rat LD50 6800 mg/kg		

Non-Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

### Section 4 - First Aid Measures

- Inhalation** \* IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If signs/symptoms continue, get medical attention.
- Skin** \* Rinse skin immediately with plenty of water for 15-20 minutes. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- Eye** \* If eye irritation persists: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Ingestion** \* If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

### Section 5 - Fire Fighting Measures

- Extinguishing Media** \* LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
- Unsuitable Extinguishing Media** \* No data available.
- Firefighting Procedures** \* Fire fighters should wear complete protective clothing including self-contained breathing apparatus.  
Keep unauthorized personnel away.
- Unusual Fire and Explosion Hazards** \* Product containers may rupture when exposed to extreme heat. Precautions should be taken to prevent release of materials.
- Hazardous Combustion Products** \* Flammable and Combustible. Substance does burn and may decompose upon heating to produce toxic fumes.
- Protection of Firefighters** \* Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
- Flash Point** \* 80° F (27° C) CC (Closed Cup)

### Section 6 - Accidental Release Measures

- Personal Precautions** \* Do not handle damaged containers or spilled material unless wearing appropriate protective clothing.
- Emergency Procedures** \* Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up.
- Environmental Precautions** \* Avoid run off to waterways and sewers.

**Containment/Clean-up Measures** \* Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.  
Use appropriate Personal Protective Equipment (PPE)

**Prohibited Materials** \* Avoid contact with strong oxidizing agents and acids.

## Section 7 - Handling and Storage

**Handling** \* KEEP OUT OF THE REACH OF CHILDREN! Keep containers tightly closed when not in use. Keep away from fire or flame. Protect building inlet from fumes/vapors when working on roofs.




**Storage** \* Avoid extreme temperatures and freezing. Keep container/package tightly closed and in a well-ventilated place.

**Special Packaging Materials** \* Not Applicable.

**Incompatible Materials or Ignition Sources** \* Avoid contact with strong oxidizing agents and acids.

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

**Pictograms** \*    

**Respiratory** \* When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

**Eye/Face** \* Wear ANSI approved safety glasses with side shields or safety goggles.

**Hands** \* Wear chemical resistant gloves with repeated or prolonged exposure.

**Engineering Measures/Controls** \* Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

Exposure Limits/Guidelines					
	Result	Canada Ontario	Mexico	NIOSH	OSHA
Xylene (1330-207)	TWAs TLV	100 ppm 150 ppm	25 ppm 35 ppm	100 ppm 150 ppm	100 ppm 150 ppm
PCBTF (98-56-6)	TWAs	Not Established	Not Established	Not Established	N/A N/A

## Section 9 - Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Clear liquid with the consistency of paint.
Color	Clear/Amber Liquid.	Odor	Paint-Like Odor.
Taste	No data available.	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	No data available		
General Properties			
Boiling Point	138 to 205° F	Melting Point	No data available
Decomposition Temperature	No data available	Heat of Decomposition	Not relevant
pH	Not Applicable	Specific Gravity/Relative Density	1.19 Water=1

Density	9.91 lbs/gal @ 25°C(77° F)	Bulk Density	No data available
Water Solubility	Insoluble	Solvent Solubility	100% Soluble
Viscosity	40-50 sec. Zahn 2 @ 25 C(77 F)		
<b>Volatility</b>			
Vapor Pressure	18.0 mmHg (torr) @ 20 C(68 F)	Vapor Density	> 1 Air=1
Evaporation Rate	3 Normal Butyl Acetate = 1	VOC (Wt.)	2.0 lbs./Gal.
VOC (Vol.)	<250 g/L	Volatiles (Wt.)	89%
Volatiles (Vol.)	88.0%		
<b>Flammability</b>			
Flash Point	80° F (27°C)	Flash Point Test Type	CC (Closed Cup)
UEL	No data available	LEL	No data available
Autoignition	No data available	Self-Accelerating Decomposition Temperature (SADT)	Not relevant
Heat of Combustion (ΔHc)	Not relevant	Burning Time	Not relevant
Flame Duration	Not relevant	Flame Height	Not relevant
Flame Extension	Not relevant	Ignition Distance	Not relevant
<b>Environmental</b>			
Half-Life	Not relevant	Octanol/Water Partition coefficient	Not relevant
Coefficient of Water	Not relevant	Bioaccumulation Factor	Not relevant
Bioconcentration Factor	Not relevant	Biochemical Oxygen Demand BOD/BOD5	Not relevant
Chemical Oxygen Demand	Not relevant	Persistence	Not relevant
Degradation	Not relevant		

## Section 10 - Stability and Reactivity

<b>Stability</b>	* Stable under normal temperatures and pressures.
<b>Hazardous Polymerization</b>	* Hazardous polymerization not indicated.
<b>Conditions to Avoid</b>	* Excessive heat and freezing.
<b>Incompatible Materials</b>	* Strong oxidizers and acids.
<b>Hazardous Decomposition Products</b>	* No known issues under normal usage conditions.

## Section 11 - Toxicological Information

Component Name	CAS	Data
PCBTf (Oxsol 900)	98-56-6	Acute Toxicity: Oral-Rat 6800 mg/kg
Xylene	1330-20-7	Acute Toxicity: Oral-Rat LD50 · 5000 mg/kg

<b>Other Component Information</b>	* ACGIH has designated the following chemicals in this product as suspected human carcinogens (A1): Titanium Dioxide. Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.
------------------------------------	---

## Section 12 - Ecological Information

<b>Ecological Fate</b>	* No data available.
<b>Persistence/Degradability</b>	* No data available.
<b>Bioaccumulation Potential</b>	* No data available.
<b>Mobility in Soil</b>	* No data available.
<b>Other Information</b>	* Do not allow product exposure to the ground or into any waterway. Do not allow entry into municipal sewer systems.

## Section 13 - Disposal Considerations

**Product**

\* Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Section 14 – Transportation Information**

DOT - United States - Department of Transportation - Shipping Name: UN 1263 Paint Related Materials, Hazard Class 3, Pkg Group 3

TDG - Canada - Transportation of Dangerous Goods - Shipping Name: UN 1263 Paint Related Materials, Hazard Class 3, Pkg Group 3

IMO/IMDG - International Maritime Transport - Shipping Name: UN 1263 Paint Related Materials Hazard Class 3, Pkg Group 3

IATA - International Air Transportation Association - Shipping Name: UN 1263 Paint Related Materials Hazard Class 3, Pkg Group 3

**Section 15 - Regulatory Information**

**SARA Hazard Classifications \* Acute, Chronic**

State Right To Know					
Component	CAS	MA	MN	NJ	PA
Xylene	1330-20-7	Yes	Yes	Yes	Yes
PCBTF	98-56-6	No	No	No	Yes

Inventory			
Component	CAS	EU EINECS	TSCA
Xylene	1330-20-7	Yes	Yes
PCBTF	98-56-6	No	No

**Canada**

**Labor**

Canada - WHMIS - Classifications of Substances

**United States**

**Environment**

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities  
Xylene 1330-20-7

**United States - California**

**Environment**

U.S. - California - Proposition 65 - Carcinogens List  
•Xylene 1330-20-7

**United States - Rhode Island**

**Labor**

U.S. - Rhode Island - Hazardous Substance List  
•Xylene 1330-20-7 Flammable

**Other Information**

\* WARNING: This product contains a chemical known to the State of California to cause cancer.

## **Section 16 - Other Information**

**Preparation Date** \* 7/18/2016

**Last Revision Date** \* 7/18/2016

**Disclaimer/Statement of Liability** \* This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the users responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.





# AP 296

## SINGLE PLY ADHESIVE PRIMER DATA SHEET

**DESCRIPTION:** APOC® 296 Single Ply Adhesive Primer is a high performance primer designed to provide exceptional adhesion and bonding strength for coatings applied to single ply membranes. It is highly recommended to use this product on most single ply surfaces prior to application of any type of protective, reflective or maintenance coating.

**PREPARATION:** Surface must be pressure washed with approved detergent prior to primer application. Surfaces must be clean, dry, and sound; contaminants such as dirt, dust, grease, wax, oils, soap film, mold & mildew, bond breakers, curing compounds, and loose, peeling paint must be removed before priming or painting. Remove all mildew by scrubbing with a solution of 16 oz bleach to one gallon water. Rinse thoroughly and allow to dry 24 hours before coating. Due to the wide variety of single ply membranes and raw materials used in their manufacturing process, always complete a peel adhesion test before starting. Contact APOC for a written directions on peel test procedures.

**APPLICATION:** For exterior use only. Protective clothing, gloves, and eyewear should be used during application of this product. Always apply on a clear, warm sunny day. Apply in morning hours to allow maximum cure time. Application should be completed a minimum of 4 hours prior to sunset. Temperatures must be above 50 °F (for 24 hours) and rising, but not above 110 °F. Apply with brush or short nap exterior roller. Apply a smooth and continuous coat over all areas. Must be cured a minimum of 4 - 8 hours before applying APOC coatings. Fully cures in 4 hours at 70 °F & 50% relative humidity. Higher humidity, thicker films, poor air flow and lower temperatures will increase dry times. Coverage rate is 1/4 gallon per square (400 – 600 Sq ft/gal) depending on surface conditions.

**CLEAN-UP:** Clean tools with mineral spirits or paint thinner.

### TYPICAL PHYSICAL & PERFORMANCE CHARACTERISTICS:

Weight Per Gallon	9.98lbs.
Solids by Weight*	10%
Solids by Volume*	9%
Viscosity (ASTM D2697)	30 - 40 Ku
Adhesion to EPDM	8.3 - 12.5 lbs/in
Adhesion to TPO	6.0 - 8.5 lbs/in
Consistency	Brush, Roll, or Spray
Skin Time (50% Relative Humidity, 70 °F)	30 min.
Full Cure (50% Relative Humidity, 70 °F)	3 - 4 hrs.
Application Temperatures	50 °F & Rising
Clean-up Tools	Mineral Spirits or Paint Thinner

NOTE: Percentages listed are + or - 5%

### Approx. Shipping Weights: (Note: All approx. weights include container)

5 gallons (18.9L)	50 lbs.
55 gallon drum (208.2L)	549 lbs.

VOC: <99 g/L (regulatory)

**HANDLING PRECAUTIONS:** Product safety information required for safe use is not included. Before handling, read product safety data sheets and container labels for safe use and for physical and health hazard information. Safety Data Sheets are available on the APOC website at [www.apoc.com](http://www.apoc.com). You can also obtain a copy from your local APOC Distributor or APOC sales representative.

**LIMITED WARRANTY AND DISCLAIMER:** To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice. User must contact APOC to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Liability, if any, is limited to replacement of product unless installed by an approved contractor in accordance with APOC warranty procedures and program.

For limited warranty and disclaimer information, visit our website at: [www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo).

©2016 Gardner-Gibson, Inc.  
Manufactured by / Fabricado por:  
Gardner-Gibson, Inc.  
P.O. Box 5449, Tampa, FL 33675

See SDS for more info





**Section 1 - Product and Company Identification**

**Material Name** \* **APOC 264 Fibered Patching Compound**  
**Product Code** \* APOC 264  
**Product Description** \* White Liquid.

**Product Use** \* Patching Compound  
**Synonyms** \* Flexible Sealant

**Manufacturer** \* Gardner Gibson Inc.  
 4701 E. 7<sup>th</sup> Avenue.  
 Tampa, FL 33605  
 United States\_  
[www.gardner-gibson.com](http://www.gardner-gibson.com)  
 Please use "Contact Us" form on the website

**Telephone**

**Technical** \* 813-367-4444  
**Emergency** \* 800-424-9300  
**Emergency** \* 703-527-3887

**Preparation Date** \* 7/16/2015  
**Last Revision Date** \* 7/16/2015

**Section 2 - Hazards Identification**

**Emergency Overview**

Empty rectangular box for emergency overview details.

**WARNING**  
 Causes mild skin irritation. Harmful if swallowed.

**Prevention** Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash thoroughly after handling.

**Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

**Storage/Disposal** Store in a closed container. Do not allow product to freeze. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



Empty rectangular box for additional hazard information.

**CAUTION** - May cause eye and skin irritation on contact.  
**Physical Form** \* Liquid

Color  
Odor  
Flash Point  
OSHA  
WHMIS

- \* White Liquid.
- \* Acrylic Paint-Like Odor.
- \* > 247 F(> 119.4444 C)
- \* Irritant
- \* Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B



GHS

- \* Skin Corrosion/Irritation - Category 3, Serious Eye Damage, Eye Irritation - Category 2A,

NFPA:



Potential Health Effects

Inhalation

- Acute (Immediate)** \* Inhalation of vapors or mists may cause central nervous system depression, light-headedness, headache, nausea and loss of coordination.
- Chronic (Delayed)** \* Under normal conditions of use, no health effects are expected.

Skin

- Acute (Immediate)** \* May cause irritation.
- Chronic (Delayed)** \* Repeated and prolonged exposure to the skin may cause dermatitis.

Eye

- Acute (Immediate)** \* Likely to cause eye irritation, burning, tearing, etc. on contact with the eyes. If swelling and irritation persist, seek medical attention.
- Chronic (Delayed)** \* Direct contact may cause slight to moderate irritation.

Ingestion

- Acute (Immediate)** \* May cause irritation. May affect the nervous system. May be harmful or fatal if swallowed.
- Chronic (Delayed)** \* Repeated and prolonged exposure may cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

**Carcinogenic Effects**

	CAS	IARC	NTP
Titanium Dioxide	13463-67-7	Group 2B-Possible Carcinogen	Evidence of Carcinogenicity

**Section 3 - Composition/Information on Ingredients**

**Hazardous Components**

Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Acrylic Polymer Solution	Proprietary	<30%			
Polyethylene Fiber	CAS # - 9002-88-4	<5%			
Titanium Dioxide	CAS # - 13463-67-7	<6%	Oral-rat TDLo:60 gm/kg		

### Non-Hazardous Components

Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Water	7732-18-5	<34%			

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

#### Section 4 - First Aid Measures

<b>Inhalation</b>	* IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If signs/symptoms continue, get medical attention.
<b>Skin</b>	* Rinse skin immediately with plenty of water for 15-20 minutes. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
<b>Eye</b>	* If eye irritation persists: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Ingestion</b>	* If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

#### Section 5 - Fire Fighting Measures

<b>Extinguishing Media</b>	* LARGE FIRE: Water spray, fog or regular foam. SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
<b>Unsuitable Extinguishing Media</b>	* No data available.
<b>Firefighting Procedures</b>	* Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep unauthorized personnel away.
<b>Unusual Fire and Explosion Hazards</b>	* Product containers may rupture when exposed to extreme heat. Precautions should be taken to prevent release of materials.
<b>Hazardous Combustion Products</b>	* Non-combustible, substance itself does not burn but may decompose upon heating to produce toxic fumes.
<b>Protection of Firefighters</b>	* Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
<b>Flash Point</b>	* > 247 F(> 119.4444 C) CC (Closed Cup)

#### Section 6 - Accidental Release Measures

<b>Personal Precautions</b>	* Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Emergency Procedures</b>	* Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up.
<b>Environmental Precautions</b>	* Avoid run off to waterways and sewers.
<b>Containment/Clean-up Measures</b>	* Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use appropriate Personal Protective Equipment (PPE)

**Prohibited Materials**

\* Avoid contact with strong oxidizing agents and acids.

**Section 7 - Handling and Storage**

<b>Handling</b>	* KEEP OUT OF THE REACH OF CHILDREN! Keep containers tightly closed when not in use.
<b>Storage</b>	* Avoid extreme temperatures and freezing. Keep container/package tightly closed and in a well-ventilated place.
<b>Special Packaging Materials</b>	* Not Applicable.
<b>Incompatible Materials or Ignition Sources</b>	* Avoid contact with strong oxidizing agents and acids.

**Section 8 - Exposure Controls/Personal Protection****Personal Protective Equipment**

**Pictograms** \*   

**Respiratory** \* When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

**Eye/Face** \* Wear ANSI approved safety glasses with side shields or safety goggles.

**Hands** \* Wear chemical resistant gloves with repeated or prolonged exposure.

**Engineering Measures/Controls** \* Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

**Exposure Limits/Guidelines**

	Result	Canada Ontario	Mexico	NIOSH	OSHA
Titanium Dioxide (13463-67-7)	TWAs	10 mg/m3 TWAEV (total dust)	10 mg/m3 TWA (as Ti)	Not established	15 mg/m3 TWA (total dust)

**Section 9 - Physical and Chemical Properties**

Material Description			
Physical Form	Liquid	Appearance/Description	White liquid with the consistency of paint.
Color	White Liquid.	Odor	Acrylic Paint-Like Odor.
Taste	No data available.	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	No data available		
General Properties			
Boiling Point	275 to 324 F	Melting Point	No data available

Decomposition Temperature	No data available	Heat of Decomposition	Not relevant
pH	8 @ 25 C(77 F)	Specific Gravity/Relative Density	1.22 Water=1
Density	10.13 lbs/gal @ 25 C(77 F)	Bulk Density	No data available
Water Solubility	Soluble 100 % @ 25 C(77 F)	Solvent Solubility	Not relevant
Viscosity	180,000 cps. @ 25 C(77 F)		
Volatility			
Vapor Pressure	0.1 mmHg (torr) @ 20 C(68 F)	Vapor Density	> 1 Air=1
Evaporation Rate	< 1 Ether = 1	VOC (Wt.)	0.01 lbs./Gal.
VOC (Vol.)	0.1 g/L	Volatiles (Wt.)	No data available
Volatiles (Vol.)	53.0%		
Flammability			
Flash Point	> 247 F(> 119.4444 C)	Flash Point Test Type	CC (Closed Cup)
UEL	No data available	LEL	No data available
Autoignition	No data available	Self-Accelerating Decomposition Temperature (SADT)	Not relevant
Heat of Combustion ( $\Delta H_c$ )	Not relevant	Burning Time	Not relevant
Flame Duration	Not relevant	Flame Height	Not relevant
Flame Extension	Not relevant	Ignition Distance	Not relevant
Environmental			
Half-Life	Not relevant	Octanol/Water Partition coefficient	Not relevant
Coefficient of Water	Not relevant	Bioaccumulation Factor	Not relevant
Bioconcentration Factor	Not relevant	Biochemical Oxygen Demand BOD/BOD5	Not relevant
Chemical Oxygen Demand	Not relevant	Persistence	Not relevant
Degradation	Not relevant		

## Section 10 - Stability and Reactivity

<b>Stability</b>	* Stable under normal temperatures and pressures.
<b>Hazardous Polymerization</b>	* Hazardous polymerization not indicated.
<b>Conditions to Avoid</b>	* Excessive heat and freezing.
<b>Incompatible Materials</b>	* Strong oxidizers and acids.
<b>Hazardous Decomposition Products</b>	* No known issues under normal usage conditions.

## Section 11 - Toxicological Information

Component Name	CAS	Data
Titanium Dioxide	13463-67-7	Acute Toxicity: orl-rat TDLo:60 gm/kg; Irritation: skn-hmn 300 ug/3D-I MLD

<b>Other Component Information</b>	* IARC has concluded that the following chemicals in this product are possibly carcinogenic to humans(Group 2B): Titanium Dioxide Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.
------------------------------------	---

## Section 12 - Ecological Information

<b>Ecological Fate</b>	* No data available.
<b>Persistence/Degradability</b>	* No data available.
<b>Bioaccumulation Potential</b>	* No data available.
<b>Mobility in Soil</b>	* No data available.
<b>Other Information</b>	* Do not allow product exposure to the ground or into any waterway. Do not allow entry into municipal sewer systems.

## Section 13 - Disposal Considerations

<b>Product</b>	* Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
----------------	---

## Section 14 - Transportation Information

DOT - United States - Department of Transportation - Shipping Name: Not Regulated.

TDG - Canada - Transportation of Dangerous Goods - Shipping Name: Not Restricted.

IMO/IMDG - International Maritime Transport Shipping Name: Not Regulated.

IATA - International Air Transportation Association - Not Regulated.

## Section 15 - Regulatory Information

**SARA Hazard Classifications** \* Acute, Chronic

### State Right To Know

Component	CAS	MA	MN	NJ	PA
Acrylic Polymer Solution	Proprietary	No	No	No	No
Polyethylene Fiber	9002-88-4	No	No	No	No
Titanium Dioxide	13463-67-7	Yes	Yes	Yes	Yes

### Inventory

Component	CAS	EU EINECS	TSCA
Acrylic Polymer Solution	25265-77-4	No	No
Polyethylene Fiber	9002-88-4	No	No
Titanium Dioxide	13463-67-7	Yes	Yes

### Canada

#### Labor

**Canada - WHMIS - Classifications of Substances**

- Titanium Dioxide 13463-67-7 D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS website.)

### United States

#### Environment

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

#### United States - California

#### Environment

U.S. - California - Proposition 65 - Carcinogens List

Titanium Dioxide 13463-67-7

### United States - Rhode Island

**Labor**

U.S. - Rhode Island - Hazardous Substance List

•Titanium Dioxide 13463-67-7 Toxic

**Other Information**

\* WARNING: This product contains a chemical known to the State of California to cause cancer.

---

**Section 16 - Other Information**

---

**Preparation Date** \* 7/16/2015

**Last Revision Date** \* 7/16/2015

**Disclaimer/Statement of Liability**

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the users responsibility to verify the suitability and completeness of such information for particular use. Gardner Gibson Inc. does not accept liability for any loss or damage that may occur from the use of this informati





# AP 264

## FLASH N' SEAL® ROOF & FLASHING SEALANT DATA SHEET

**COMPLIANCE:** Exceeds performance requirements of ASTM D1475, ASTM D2196, ASTM D2939 and TAS 139. MIAMI-DADE APPROVED. ASBESTOS FREE.

**DESCRIPTION:** APOC® 264 FLASH N' SEAL® Roof and Flashing Sealant is an extra tough, fiber reinforced, reflective and protective patching compound. APOC® 264 FLASH N' SEAL® contains PolyCryl™, a hybrid technology that combines the strength of polyurethanes with the versatility and ease of use of Acrylic polymers. PolyCryl™ hybrid technology creates a high performance, extremely durable sealant for a variety of roofing & construction applications. APOC® 264 FLASH N' SEAL® provides significantly higher adhesion, elasticity and tensile strength over regular acrylic products. APOC 264 is also UV Blocked and highly reflective for extended durability and long term exposure. This product is ideal for 3 coursing and can be used with a variety of reinforcing fabrics. APOC® 264 FLASH N' SEAL® can be left uncoated as a stand alone product or in conjunction with most APOC® coating products. Not recommended for use prior to installing silicone based coatings.

**PREPARATION:** All surfaces must be dry and free of dust, dirt, oil, loose granules and gravel. Use of this product on TPO, PVC or Hypalon single ply membranes requires the use of an approved APOC primer and the completion of pull tests prior to application.

**FOR BEST RESULTS:** Apply in early morning hours on clear sunny day.

**APPLICATION:** For exterior use only. Protective clothing, gloves, and eyewear should be used during application of this product. Always apply on a clear, warm sunny day. Apply in morning hours to allow maximum cure time. Application should be completed a minimum of 4 hours prior to sunset. Temperatures must be above 55 °F (for 24 hours) and rising, but not above 110 °F. DO NOT apply if heavy dew or rain is expected within 24 - 48 hours. Skins over in 4 hours and fully cures in 24 - 36 hours at 70 °F & 50% relative humidity. Higher humidity, thicker films, shade, poor air flow and lower temperatures will increase dry times. Apply with a trowel or paint brush. Coat entire damaged area and extend 2" beyond damaged area. Embed reinforcing fabric into the repair while wet. Apply second layer of patch, brushing over and into embedded fabric. Allow to cure 24 - 36 hours and coat entire roof with an APOC waterbased reflective roof coating. DO NOT THIN.

**COVERAGE RATES:** Approximately 25 sq. ft. per gal.

**NOTE:** If roof becomes hot (over 100 °F) during application, lightly mist roof surface with water spray to prevent coating from drying too fast. Remove any excess or puddling water prior to coating. If roof surfaces become soiled with age, due to the elements, APOC® 264 can be cleaned with a mild solution of bleach and water. Excess scrubbing should be avoided. If coloring is desired, a typical addition of 3 - 4 ounces per gallon of Universal colorant can be added, which will result in light pastel colors. Note: Color tinting will disclaim warranty.

**CLEAN-UP:** Clean tools with soap and water.

©2010 Gardner-Gibson, Inc.  
Manufactured by / Fabricado por:  
Gardner-Gibson, Inc.  
P.O. Box 5449, Tampa, FL 33675

See SDS for more info

### TYPICAL PHYSICAL & PERFORMANCE CHARACTERISTICS:

Weight Per Gallon	9.6 - 10.6 lbs./gal.
Viscosity (pen)	240 dmm
pH	7.0 - 7.5
Solids by Weight	63%
Tensile Strength	300 - 350 psi
Elongation (ASTM D562)	425%
Adhesion to Polyurethane Foam	Excellent
Combustible Solvents	None
Consistency	Smooth Trowel
Skin Time (50% Relative Humidity, 70 °F)	4 hours
Full Cure (50% Relative Humidity, 70 °F)	36 hours
Application Temperatures	55 °F - 110 °F
Clean-up Tools	Soap & Water

\*NOTE: Percentages listed are + or - 5%

### Approx. Shipping Weights: (Note: All approx. weights include container)

1 gallon (3.785L)	12 lbs.
3.5 gallons (13.2L)	40 lbs.
5 gallons (18.9L)	55 lbs.

VOC: <10 g/L (regulatory)

**STORAGE & HANDLING PRECAUTIONS:** Product safety information required for safe use is not included. Before handling, read product safety data sheets and container labels for safe use and for physical and health hazard information. Safety Data Sheets are available on the APOC website at [www.apoc.com](http://www.apoc.com). You can also obtain a copy from your local APOC Distributor or APOC sales representative. **Shelf life is two years from date of manufacturer.** Do not store at temperatures below 50 °F or above 110 °F. For maximum shelf life store between 60°F and 80°F. Keep container sealed when not in use. Always keep covered and protected from the elements. When transporting this product, ensure that lid is tight and pail secured. Do not allow pail to tumble as this may cause lid to loosen and leakage to occur. Do not transport on passenger seats or inside the passenger compartment of any vehicle. Store product in the cargo area of vehicle, and secure over protective cloths to prevent damage due to accidental spills. The manufacturer also disclaims liability for flat surface application where poor drainage or ponding of water may prevail. Do not reuse empty container. Dispose of in an environmentally acceptable manner. Do not use in drinking water or food systems.

**LIMITED WARRANTY AND DISCLAIMER:** To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice. User must contact APOC to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Liability, if any, is limited to replacement of product unless installed by an approved contractor in accordance with APOC warranty procedures and program.

For limited warranty and disclaimer information, visit our website at: [www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo).





## Section 1 - Product and Company Identification

**Material Name** • Liquid Rubber Flashing Cement  
**Chemical Category** • Mixture  
**Product Code** • AP-1155  
**Product Description** • All Weather Roofing Cement  
**Manufacturer** • APOC - Asphalt Products Oil Corporation  
4161 East 7th Avenue  
Tampa, FL 33605

**Telephone**

**General** • 813-248-2101  
**Emergency** • 800-424-9300 - CHEMTREC  
**Technical** • 813-248-2101 - Customer Service

## Section 2 - Hazards Identification

### GHS HAZARDS AND PRECAUTIONS

#### SIGNAL WORD: WARNING!

*Flammable liquid and vapor. Contains Combustible Petroleum Distillates. Harmful or Fatal if swallowed. Keep away from heat, sparks, and open flame. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage, respiratory tract irritation, dizziness, or loss of consciousness. May cause skin and eye irritation.*

**Prevention** *Avoid breathing dust, fume, gas, mist, vapors and/or spray. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. Use personal protective equipment as required. Keep out of reach of children.*

**Response** *IF INHALED: If breathing is difficult, remove victim 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

**Storage/Disposal** *Store in a closed container. Store in a well-ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.*



**Physical Form** • Liquid  
**Color** • Black  
**Odor** • Mild Hydrocarbon.  
**Flash Point** • 105°F(40.5°C) CC (Closed Cup)

- UEL • 6 %
- LEL • 0.9 %
- OSHA(HCS2012) • Flammable Liquids - Category 3, Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A
- WHMIS • Combustible Liquids - B3, Other Toxic Effects - D2A, Other Toxic Effects - D2B
- GHS • Flammable Liquids - Category 3, Specific Target Organ Toxicity Repeated Exposure - Category 2, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A

**Potential Health Effects**

**Inhalation:**

**Acute (Immediate)** • May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.

**Chronic (Delayed)** • Refer to other information found in Section 11-Toxicology.

**Skin:**

**Acute (Immediate)** • May cause irritation.

**Chronic (Delayed)** • Repeated and prolonged exposure may cause dermatitis.

**Eye:**

**Acute (Immediate)** • May cause irritation.

**Chronic (Delayed)** • Repeated and prolonged exposure may cause irritation.

**Ingestion:**

**Acute (Immediate)** • May be harmful or fatal if swallowed.

**Chronic (Delayed)** • Repeated and prolonged exposure may be harmful.

**Carcinogenic Effects** • This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 - Toxicological Information for more details.

Carcinogenic Effects			
	CAS	IARC	NTP
Hydrated aluminium-magnesium silicate	12174-11-7	Group 3-Not Classifiable	Not established
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Under Consideration

**Section 3 - Composition/Information on Ingredients**

Hazardous Components				
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive
Asphalt	CAS:8052-42-4 UN:NA1999 EINECS:232-490-9	50% TO 70%	Ingestion/Oral-Rat LD50 • >5000 mg/kg Inhalation-Rat LC50 • >94.4 mg/m³	ANSI: Irrit. WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; Eye Irrit. 2A; Skin Irrit. 2
Mineral Spirits	CAS:8052-41-3 EINECS:232-489-3	10% TO 20%		EU DSD/DPD: Carc.Cat.2; R45Muta.Cat.2; R46Xn; R65
Cellulose	CAS:9004-34-6 EINECS:232-674-9	5% TO 15%	Ingestion/Oral-Rat LD50 • >5 g/kg Inhalation-Rat LC50 • >5800 mg/m³ 4 Hour(s)	OSHA HCS 1994: Irrit. WHMIS: Other Toxic Effects - D2B UN GHS: Eye Irrit. 2A; Skin Irrit. 2
Kaolin	CAS:1332-58-7	5% TO 15%		WHMIS: Other Toxic Effects - D2A UN GHS: Eye Irrit. 2A; STOT RE 2
Solvent naphtha (petroleum), light	CAS:64742-95-6 EINECS:265-199-0	5% TO 10%		UN GHS: Asp. Tox. 1; Carc. 1B

aromatic				
Hydrated aluminium-magnesium silicate	CAS:12174-11-7	1% TO 5%		WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 2; STOT RE 2
Styrene/Butadiene Polymer	CAS:9003-55-8	1% TO 5%		
Quartz	CAS:14808-60-7 EINECS:238-878-4	1% TO 2%		WHMIS: Other Toxic Effects - D2A UN GHS: Carc. 1A; STOT RE 1
Benzene, 1,3,5-trimethyl	CAS:108-67-8 EINECS:203-604-4	0.5% TO 1%		EU DSD/DPD: R10Xi; R37N; R51 R53
1,2,4-Trimethylbenzene	CAS:95-63-6 EINECS:202-436-9	0.1% TO 0.5%	Ingestion/Oral-Rat LD50 • 5 g/kg Inhalation-Rat LC50 • 18000 mg/m <sup>3</sup> 4 Hour(s)	WHMIS: Comb. Liq. - B3

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

See Section 11 for Toxicological Information.

#### Section 4 - First Aid Measures

- Inhalation** • IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention immediately.
- Skin** • IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
- Eye** • 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.
- Ingestion** • Call a physician or poison control center immediately. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Never give anything by mouth to an unconscious person.

See Section 2 for Potential Health Effects.

#### Section 5 - Fire Fighting Measures

- Extinguishing Media** • Use CO<sub>2</sub>, dry chemical, or foam.
- Unsuitable Extinguishing Media** • Do not use direct stream of water.
- Firefighting Procedures** • Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.
- Unusual Fire and Explosion Hazards** • Combustible liquid. May release irritating or toxic gases, fumes, or vapors.
- Hazardous Combustion Products** • Carbon monoxide, carbon dioxide, hydrocarbons.
- Protection of Firefighters** • Firefighters should wear self-contained breathing apparatus and full protective gear.
- Flash Point** • 105°F(40.5°C) CC (Closed Cup)
- Explosion Limits**
- Upper** • 6 %
- Lower** • 0.9 %
- Autoignition Temperature** • No data available

#### Section 6 - Accidental Release Measures

- Personal Precautions** • Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Stay upwind. Ventilate the area before entry.

**Emergency Procedures**

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Stop leak if you can do it without risk. Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up. Keep unauthorized personnel away.

**Environmental Precautions**

- Prevent entry into waterways, sewers, basements or confined areas.

**Containment/Clean-up Measures**

- Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Use appropriate Personal Protective Equipment (PPE)

**Prohibited Materials**

- Avoid contact with strong oxidizing agents and acids.

**Section 7 - Handling and Storage****Handling**

- KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat, sparks, and flame – No Smoking. Use only with adequate ventilation.

**Storage**

- Store in a well-ventilated place. Keep container tightly closed. No open flames, no sparks and no smoking.

**Special Packaging Materials**

- No data available

**Incompatible Materials or Ignition Sources**

- Avoid contact with strong oxidizing agents and acids.

**Section 8 - Exposure Controls/Personal Protection****Personal Protective Equipment****Pictograms****Respiratory**

- In case of insufficient ventilation, wear suitable respiratory equipment. If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard. When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator.

**Eye/Face**

- Wear ANSI approved safety glasses with side shields or safety goggles.

**Hands**

- Wear chemical protective gloves made of Nitrile or Neoprene.

**Skin/Body**

- Wear clothing that covers the skin to prevent skin exposure.

**General Industrial Hygiene Considerations**

- Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. When using do not smoke, eat, or drink.

**Engineering Measures/Controls**

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Mexico	OSHA	United States - California
Quartz (14808-60-7)	TWAs	0.025 mg/m <sup>3</sup> TWA (respirable fraction)	0.10 mg/m <sup>3</sup> TWA (designated substance regulation, respirable)	0.1 mg/m <sup>3</sup> TWA LMPE-PPT (respirable fraction)	Not established	0.3 mg/m <sup>3</sup> PEL (total dust); 0.1 mg/m <sup>3</sup> PEL (respirable dust)
Kaolin (1332-58-7)	TWAs	2 mg/m <sup>3</sup> TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	2 mg/m <sup>3</sup> TWA (containing no Asbestos and <1% Crystalline silica, respirable)	10 mg/m <sup>3</sup> TWA LMPE-PPT	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)	2 mg/m <sup>3</sup> PEL (respirable dust, containing no Asbestos fibers, <1% Crystalline silica)
Cellulose (9004-34-6)	TWAs	10 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA LMPE-PPT	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)	5 mg/m <sup>3</sup> PEL (respirable fraction, listed under Particulates not otherwise regulated); 10 mg/m <sup>3</sup> PEL (total dust, listed under

						Particulates not otherwise regulated)
Mineral Spirits (8052-41-3)	TWAs	100 ppm TWA	525 mg/m3 TWA (140°C Flash aliphatic solvent)	100 ppm TWA LMPE-PPT; 523 mg/m3 TWA LMPE-PPT	500 ppm TWA; 2900 mg/m3 TWA	100 ppm PEL; 525 mg/m3 PEL
Asphalt (8052-42-4)	TWAs	0.5 mg/m3 TWA (fume, inhalable fraction, as benzene soluble aerosol)	0.5 mg/m3 TWA (fume, inhalable, as Benzene-soluble aerosol)	5 mg/m3 TWA LMPE-PPT	Not established	5 mg/m3 PEL (fume)

### Exposure Control Notations

#### ACGIH

- \*Kaolin (1332-58-7): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)
- \*Asphalt (8052-42-4): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free))
- \*Quartz (14808-60-7): Carcinogens: (A2 - Suspected Human Carcinogen)

#### Key to abbreviations

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

## Section 9 - Physical and Chemical Properties

### Material Description

Physical Form	Liquid	Appearance/Description	Thick black semi-liquid.
Color	Black	Odor	Mild Hydrocarbon.
Physical and Chemical Properties	Semi-liquid		

### General Properties

Boiling Point	310 to 400 F	Melting Point	No data available
pH	No data available	Specific Gravity/Relative Density	1.125 Water=1
Density	9.37 lbs/gal	Bulk Density	No data available
Water Solubility	No data available	Solvent Solubility	No data available
Viscosity	See TDS		

### Volatility

Vapor Pressure	2 mmHg (torr) @ 68 F(20 C)	Vapor Density	1 Air=1
VOC (Vol.)	< 300 g/L		

### Flammability

Flash Point	105°F(40.5°C) CC (Closed Cup)	UEL	6 %
LEL	0.9 %	Autoignition	No data available

## Section 10 - Stability and Reactivity

### Stability

- Stable under normal temperatures and pressures.

### Hazardous Polymerization

- Hazardous polymerization not indicated.

### Conditions to Avoid

- Avoid contact with strong oxidizing agents and flame.

### Incompatible Materials

- Strong oxidizers.

**Hazardous Decomposition Products** • Carbon monoxide, carbon dioxide and hydrocarbons.

## Section 11 - Toxicological Information

Component Name	CAS	Data
Asphalt (50% TO 70%)	8052-42-4	Acute Toxicity: orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3
Cellulose (5% TO 15%)	9004-34-6	Acute Toxicity: orl-rat LD50:>5 gm/kg
Solvent naphtha (petroleum), light aromatic (5% TO 10%)	64742-95-6	Acute Toxicity: orl-rat LD50:8400 mg/kg
1,2,4-Trimethylbenzene (0.1% TO 0.5%)	95-63-6	Acute Toxicity: orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H

**Other Component Information**

- IARC has concluded that the following chemicals in this product are carcinogenic to humans(Group 1): silica, quartz. ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz. NTP has listed the following chemicals in this product as known human carcinogens: silica, quartz. Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.
- This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

**Section 12 - Ecological Information**

- Ecological Fate** • No data available.  
**Persistence/Degradability** • No data available.  
**Bioaccumulation Potential** • No data available.  
**Mobility in Soil** • No data available.

**Section 13 - Disposal Considerations**

**Product** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Section 14 - Transportation Information**

**DOT:** Not restricted if shipped in containers <450L (119 gallons) Restricted if shipped in containers >450L (119 gallons)

**TDG - Canada Transportation of Dangerous Goods:** Not Restricted under General Exemption for small container packaging. If shipped as Bulk: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

**IMDG:** Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III 1.33 Class 3, Flammable Liquids.

**IMDG Code 2.3.2.5** - exempted from marking, labeling & testing of packages.

**IATA - International Air Transportation Association - TARS, LIQUID;** UN1999; Hazard Class: 3; Packing Group: III.

**Section 15 - Regulatory Information**

**SARA Hazard Classifications** • Acute, Chronic

**Risk & Safety Phrases** • California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

Component	CAS	State Right To Know			
		MA	MN	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes	Yes
Mineral Spirits	8052-41-3	Yes	Yes	Yes	Yes
Cellulose	9004-34-6	Yes	Yes	Yes	Yes
Kaolin	1332-58-7	Yes	Yes	Yes	Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6	No	No	No	No
Hydrated aluminium-magnesium silicate	12174-11-7	No	No	No	No
Styrene/Butadiene Polymer	9003-55-8	No	No	No	No
Quartz	14808-60-7	Yes	Yes	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No	No
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes	Yes

Inventory			
Component	CAS		TSCA
Asphalt	8052-42-4		Yes
Mineral Spirits	8052-41-3		Yes
Cellulose	9004-34-6		Yes
Kaolin	1332-58-7		Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6		Yes
Hydrated aluminium-magnesium silicate	12174-11-7		N/A
Styrene/Butadiene Polymer	9003-55-8		Yes
Quartz	14808-60-7		Yes
Benzene, 1,3,5-trimethyl	108-67-8		Yes
1,2,4-Trimethylbenzene	95-63-6		Yes

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

•Kaolin	1332-58-7	5% TO 15%	D2A
•Cellulose	9004-34-6	5% TO 15%	Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers)
•Asphalt	8052-42-4	50% TO 70%	Not Listed
•1,2,4-Trimethylbenzene	95-63-6	0.1% TO 0.5%	B3
•Solvent naphtha (petroleum), light aromatic	64742-95-6	5% TO 10%	B3, D2B
•Quartz	14808-60-7	1% TO 2%	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)
•Mineral Spirits	8052-41-3	10% TO 20%	B3, D2B
•Benzene, 1,3,5-trimethyl	108-67-8	0.5% TO 1%	B3
•Hydrated aluminium-magnesium silicate	12174-11-7	1% TO 5%	Not Listed
•Styrene/Butadiene Polymer	9003-55-8	1% TO 5%	Uncontrolled product according to WHMIS classification criteria

## United States

### Environment

#### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

•Kaolin	1332-58-7	5% TO 15%	Not Listed
•Cellulose	9004-34-6	5% TO 15%	Not Listed
•Asphalt	8052-42-4	50% TO 70%	Not Listed
•1,2,4-Trimethylbenzene	95-63-6	0.1% TO 0.5%	1.0 % de minimis concentration
•Solvent naphtha (petroleum), light aromatic	64742-95-6	5% TO 10%	Not Listed
•Quartz	14808-60-7	1% TO 2%	Not Listed
•Mineral Spirits	8052-41-3	10% TO 20%	Not Listed
•Benzene, 1,3,5-trimethyl	108-67-8	0.5% TO 1%	Not Listed
•Hydrated aluminium-magnesium silicate	12174-11-7	1% TO 5%	Not Listed
•Styrene/Butadiene Polymer	9003-55-8	1% TO 5%	Not Listed

## United States - California

### Environment

#### U.S. - California - Proposition 65 - Carcinogens List

•Kaolin	1332-58-7	5% TO 15%	Not Listed
•Cellulose	9004-34-6	5% TO 15%	Not Listed
•Asphalt	8052-42-4	50% TO 70%	Not Listed
•1,2,4-Trimethylbenzene	95-63-6	0.1% TO 0.5%	Not Listed
•Solvent naphtha (petroleum), light aromatic	64742-95-6	5% TO 10%	Not Listed
•Quartz	14808-60-7	1% TO 2%	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
•Mineral Spirits	8052-41-3	10% TO 20%	Not Listed
•Benzene, 1,3,5-trimethyl	108-67-8	0.5% TO 1%	Not Listed
•Hydrated aluminium-magnesium silicate	12174-11-7	1% TO 5%	carcinogen, initial date 12/28/99 (>5 µm in length)
•Styrene/Butadiene Polymer	9003-55-8	1% TO 5%	Not Listed

## Section 16 - Other Information

Prepared By • GG Inc.  
 Last Revision Date • 4/28/2015



**Disclaimer/Statement of Liability**

- This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.
- 

**NFPA:**



# BLACK GOLD®

## Liquid Rubber Flashing Cement Data Sheet

**COMPLIANCE:** Exceeds performance requirements of ASTM D 6511, ASTM D 3409, ASTM D 4586, TYPE I, MIAMI-DADE APPROVED, ASBESTOS FREE.

**DESCRIPTION:** Black Gold Liquid Rubber Flashing Cement is a premium grade highly modified, SEBS Flashing Cement. This product is formulated for use with built-up systems, modified bitumen membranes (APP & SBS), base sheets, ply sheets, shingles and other approved surfaces. Black Gold can be used in all weather conditions and even bonds under water. This high quality product is available exclusively to professional installers.

**NOTE:** DO NOT use on TPO, EPDM, PVC or other single ply membranes.

**PREPARATION:** All surfaces must have proper drainage and be clean, and free of surface rust and any other foreign matter. Excessive particulate surfacing materials on modified membranes must be removed (sweeping with a stiff broom is recommended) prior to application. On reroofing applications, all deck and existing membrane repairs should be made first. Severely weathered BUR membranes may require a pre-application of APOC® 103 Asphalt Primer. Metal surfaces must have all rust and scale removed. DO NOT HEAT OR THIN.

**FOR BEST RESULTS:** Apply on clear sunny day when surface temperatures are between 40° and 100° F. In colder weather product should be stored in heated room (65° to 80° F.) at least 24 hours prior to application. After a minimum of 45 days cure time, apply a reflective coating. This will greatly extend the life of the roof.

**APPLICATION:** For exterior use only. Protective clothing and eyewear should be used during application of this product. Three Course Method: Apply with trowel or putty knife, working material to an even consistency over and into the area to be repaired. Apply 1/8" to 1/4" thick, two to three inches beyond the problem area. Then press a strip of APOC® Fabric into the cements and cover with an additional layer of flashing cement. Five Course Method: Complete 3 course directions above. Then press a second strip of APOC® Fabric into the uncured cements and cover with an additional layer of flashing cement. Upon completion of your 3 or 5 course repair, form a cant with the cement around chimneys and other roof projections. Coverage rate is approximately 12 1/2 sq. ft. per gallon when applied 1/8" thick. For best results during reroofing, cut the mod-bit sheets to a maximum of 18 ft. lengths and allow to relax on job site before application.

**PRECAUTIONS:** When transporting this product, ensure that lid is tight and pail secure and upright. Do not allow pail to tumble as this may cause lid to loosen and leakage to occur. Do not transport on passenger seats or inside the passenger compartment of any vehicle. Store product in the cargo area of vehicle, and secure over protective cloths to prevent damage due to accidental spills. Do not store at temperatures above 110° F. Do not reuse empty containers. Do not use in drinking water or food systems. Seal container when not in use.

**CLEAN-UP:** Clean tools with paint thinner or mineral spirits.

### TYPICAL PHYSICAL & PERFORMANCE CHARACTERISTICS

Weight Per Gallon	8.0-9.0 lbs.
Consistency	Trowel
Application Temperatures	35° - 120°F
Clean-up Tools	Paint Thinner, Mineral Spirits

**Approx. Shipping Weights:** (Note: All approx. weights include container.)

3 gallons (11.4L)	27 lbs.
5 gallons (18.9L)	45 lbs.

**CAUTION – COMBUSTIBLE MIXTURE**  
**CAUTION! HARMFUL OR FATAL IF SWALLOWED.**  
**EYE, SKIN AND RESPIRATORY IRRITANT.**

Contains Petroleum Distillate. Keep away from heat, sparks and open flame. If swallowed DO NOT induce vomiting. Call physician immediately. In case of : Eye contact - flush with large amounts of room temperature water for 15 minutes; Skin contact - wash thoroughly with soap and water; Irregular or stopped breathing - administer oxygen, give artificial respiration and get medical attention immediately. Avoid prolonged breathing of vapor or spray mist.

**FOR EXTERIOR USE ONLY**  
**Use with adequate Ventilation**  
**Keep Out of Reach of Children**  
**VOC/VOS - Less than 250 g/L max. (2.1 lbs./gal.)**

CALIF. PROP. 65 • CHEMICAL WARNING (CALIFORNIA HEALTH AND SAFETY CODE #25249.5 ET SEQ). WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or reproductive harm. Use proper protection and adequate ventilation, when using product.

**WARRANTY AND DISCLAIMER:** To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice. User must contact APOC to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Liability, if any, is limited to replacement of product unless installed by an approved contractor in accordance with APOC warranty procedures and program.

For limited warranty and disclaimer information, visit our website at: [www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo).

©2009 Gardner Asphalt Corporation Manufactured by / Fabricado por: Gardner Asphalt Corporation P.O. Box 5449, Tampa, FL 33675



See MSDS for more info



Gardner Asphalt Corporation • P.O. Box 5449 • Tampa, Florida 33675-5449  
Phone: (813) 248-2101 • Fax (813) 248-6768 • [www.apoc.com](http://www.apoc.com)



Section 1 - Product and Company Identification

Material Name \* APOC 581 100% Silicone Patch & Roof Repair Sealant
Product Code \* AP-5812
Product Description \* White Liquid.
Product Use \* Elastomeric Roof Sealant
Synonyms \* White Caulk Membrane

Manufacturer \* Gardner Gibson
4701 E. 7th Avenue
Tampa, FL 33605
United States
www.gardner-gibson.com
Please use "Contact Us" form on the website

Telephone
Technical \* 813-248-2101
Emergency \* 800-424-9300
Emergency \* 703-527-3887

Preparation Date \* 4/26/2016
Last Revision Date \* 4/26/2016

Section 2 - Hazards Identification

Emergency Overview

WARNING

Causes mild skin irritation. Harmful if swallowed.

Prevention Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash thoroughly after handling.

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

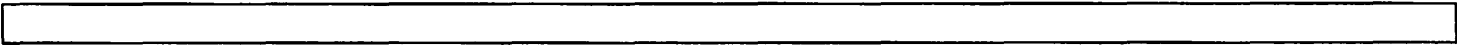
Storage/Disposal Store in a closed container. Do not allow product to freeze. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



**Classification:**  
 Eye irritation, Category 2A  
 Skin sensitization, Category 1  
 Carcinogenic, Category 2

**Statements of Hazard:**  
 Warning  
 H319 Causes serious eye irritation  
 H317 May cause allergic skin reaction  
 H351 Suspected of causing cancer

**Precautions for Safe Handling:**  
 P102 Keep out of the reach of children  
 P201 Obtain special instructions before use  
 P202 Do not handle until all safety precautions have been read and understood  
 P261 Avoid breathing vapors or mists  
 P264 Wash hands thoroughly after handling  
 P272 Contaminated work clothing should not be allowed out of the workplace  
 P281 Use personal protective equipment as required



**CAUTION - May cause eye and skin irritation on contact.**

**Physical Form**

**Color**

\* Liquid

**Odor**

\* White Liquid.

**Flash Point**

\* Paint-Like Odor.

**OSHA**

\* 247 F(119.44 C)

**WHMIS**

\* Irritant

\* Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B



**GHS**

\* Skin Corrosion/Irritation - Category 1  
 Serious Eye Damage, Eye Irritation - Category 2A  
 Carcinogenic - Category 2B

**NFPA:**

**Health : 2**

**Flammability: 1**

**Reactivity: 0**

**Personal Protection: G**

**Potential Health Effects**

**Inhalation**

**Acute (Immediate)**

\* Inhalation of vapors or mists may cause central nervous system depression, light-headedness, headache, nausea and loss of coordination.

**Chronic (Delayed)**

\* Under normal conditions of use, no health effects are expected.

**Skin**

**Acute (Immediate)**

\* May cause irritation.

**Chronic (Delayed)**

\* Repeated and prolonged exposure to the skin may cause dermatitis.

**Eye**

**Acute (Immediate)**

\* Likely to cause eye irritation, burning, tearing, etc. on contact with the eyes. If swelling and irritation persist, seek medical attention.

**Chronic (Delayed)**

\* Direct contact may cause slight to moderate irritation.

**Ingestion****Acute (Immediate)**

\* May cause irritation. May affect the nervous system. May be harmful or fatal if swallowed.

**Chronic (Delayed)**

\* Repeated and prolonged exposure may cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

Carcinogenic Effects			
	CAS	IARC	NTP
Titanium Dioxide	13463-67-7	Group 2B-Possible Carcinogen	Evidence of Carcinogenicity

**Section 3 - Composition/Information on Ingredients**

Hazardous Components					
Chemical Name	Identifiers	%(weight t)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Dimethyl Polysiloxe	CAS: 70131-67-8	40.0%	LD50 Oral - rat - > 62.080 mg/kg		
Silica Quartz	CAS: 7631-86-9	35.0%			
Polydimethyl Siloxane	CAS: 63148-62-9	15.0%			
Methyltrimethyl Siloxane	CAS: 22984-54-9	3.0%	LD50 Oral, rat = 12,500 mg/kg		
Titanium Dioxide	CAS: 13463-67-7	6.0%	LD50 Oral, rat · 60 gm/kg		
Aminopropyl Trimethoxy Silane	CAS: 13822-56-5	1.0%	LD50 Oral - rat - > 62.080 mg/kg		

Non-Hazardous Components					
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

**Section 4 - First Aid Measures****Inhalation**

\* IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If signs/symptoms continue, get medical attention.

**Skin**

\* Rinse skin immediately with plenty of water for 15-20 minutes. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

**Eye**

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

**Ingestion**

\* If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

**Section 5 - Fire Fighting Measures**

<b>Extinguishing Media</b>	* LARGE FIRE: Water spray, fog or regular foam. SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
<b>Unsuitable Extinguishing Media</b>	* No data available.
<b>Firefighting Procedures</b>	* Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep unauthorized personnel away.
<b>Unusual Fire and Explosion Hazards</b>	* Product containers may rupture when exposed to extreme heat. Precautions should be taken to prevent release of materials.
<b>Hazardous Combustion Products</b>	* Non-combustible, substance itself does not burn but may decompose upon heating to produce toxic fumes.
<b>Protection of Firefighters</b>	* Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
<b>Flash Point</b>	* 247 F(119.4 C) CC (Closed Cup)

---

## Section 6 - Accidental Release Measures

---

<b>Personal Precautions</b>	* Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Emergency Procedures</b>	* Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up.
<b>Environmental Precautions</b>	* Avoid run off to waterways and sewers.
<b>Containment/Clean-up Measures</b>	* Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use appropriate Personal Protective Equipment (PPE)
<b>Prohibited Materials</b>	* Avoid contact with strong oxidizing agents and acids.

---

## Section 7 - Handling and Storage

---

<b>Handling</b>	* KEEP OUT OF THE REACH OF CHILDREN! Keep containers tightly closed when not in use.
<b>Storage</b>	* Avoid extreme temperatures and freezing. Keep container/package tightly closed and in a well-ventilated place.
<b>Special Packaging Materials</b>	* Not Applicable.
<b>Incompatible Materials or Ignition Sources</b>	* Avoid contact with strong oxidizing agents and acids.

---

## Section 8 - Exposure Controls/Personal Protection

---

### Personal Protective Equipment

#### Pictograms



#### Respiratory

- \* Use with adequate ventilation. A respirator is required. Use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

#### Eye/Face

- \* Wear ANSI approved safety glasses with side shields or safety goggles.

**Hands**

\* Wear chemical resistant gloves with repeated or prolonged exposure.

**Engineering Measures/Controls**

\* Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

Exposure Limits/Guidelines					
	Result	Canada Ontario	Mexico	NIOSH	OSHA
Titanium Dioxide (13463-67-7)	TWAs	10 mg/m3 TWAEV (total dust)	10 mg/m3 TWA (as Ti)	10 mg/m3 - TWA	15 mg/m3 TWA (total dust)
Silica (7631-86-9)	TWAs	80 mg/m3-TWAEV	80 mg/m3-TWA	80 mg/m3-TWA	80 mg/m3-TWA

**Section 9 - Physical and Chemical Properties**

Material Description			
Physical Form	Liquid	Appearance/Description	White liquid with heavy consistency.
Color	White Liquid.	Odor	Paint-Like Odor.
Taste	No data available.	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	No data available		
General Properties			
Boiling Point	>300 F	Melting Point	No data available
Decomposition Temperature	No data available	Heat of Decomposition	Not relevant
pH	8 @ 25 C(77 F)	Specific Gravity/Relative Density	1.04 Water=1
Density	8.660 lbs/gal @ 25 C(77 F)	Bulk Density	No data available
Water Solubility	Soluble 0 % @ 25 C(77 F)	Solvent Solubility	Not relevant
Viscosity	200,000 cps. @ 25 C(77 F)		
Volatility			
Vapor Pressure	5.3 mmHg (torr) @ 20 C(68 F)	Vapor Density	> 1 Air=1
Evaporation Rate	< 0.7 Ether = 1	VOC (Wt.)	No data available
VOC (Vol.)	<10 g/L	Volatiles (Wt.)	No data available
Volatiles (Vol.)	No data available		
Flammability			
Flash Point	>247 f	Flash Point Test Type	CC (Closed Cup)
UEL	No data available	LEL	No data available
Autoignition	No data available	Self-Accelerating Decomposition Temperature (SADT)	Not relevant
Heat of Combustion ( $\Delta H_c$ )	Not relevant	Burning Time	Not relevant
Flame Duration	Not relevant	Flame Height	Not relevant
Flame Extension	Not relevant	Ignition Distance	Not relevant
Environmental			
Half-Life	Not relevant	Octanol/Water Partition coefficient	Not relevant
Coefficient of Water	Not relevant	Bioaccumulation Factor	Not relevant
Bioconcentration Factor	Not relevant	Biochemical Oxygen Demand BOD/BOD5	Not relevant
Chemical Oxygen Demand	Not relevant	Persistence	Not relevant
Degradation	Not relevant		

**Section 10 - Stability and Reactivity****Stability**

\* Stable under normal temperatures and pressures.

**Hazardous Polymerization**

\* Hazardous polymerization not indicated.

**Conditions to Avoid  
Incompatible Materials**

- \* Excessive heat and freezing.
- \* Strong oxidizers and acids.
- \* No known issues under normal usage conditions.

**Products**       **Hazardous Decomposition**

---

## Section 11 - Toxicological Information

---

Component Name	CAS	Data
Dimethyl Polysiloxane	70131-67-8	Acute Toxicity: LD50 Oral - rat - > 62.080 mg/kg
Methyltrimethyl Siloxane	22984-54-9	Acute Toxicity: LD50 Oral, rat = 12,500 mg/kg
Titanium Dioxide	13463-67-7	Acute Toxicity: LD50 Oral, rat = 60 gm/kg
Aminopropyl Trimethoxy Silane	13822-56-5	Acute Toxicity: LD50 Oral - rat - > 62.080 mg/kg

**Other Component  
Information**

- \* IARC has concluded that the following chemicals in this product are carcinogenic to humans(Group 1): ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz. NTP has listed the following chemicals in this product as known human carcinogens: Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.

---

## Section 12 - Ecological Information

---

<b>Ecological Fate</b>	* No data available.
<b>Persistence/Degradability</b>	* No data available.
<b>Bioaccumulation Potential</b>	* No data available.
<b>Mobility in Soil</b>	* No data available.
<b>Other Information</b>	* Do not allow product exposure to the ground or into any waterway. Do not allow entry into municipal sewer systems.

---

## Section 13 - Disposal Considerations

---

**Product**      \* Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transportation Information

DOT - United States - Department of Transportation - Shipping Name: Not Regulated.

TDG - Canada - Transportation of Dangerous Goods - Shipping Name: Not Restricted.

IMO/IMDG - International Maritime Transport Shipping Name: Not Regulated.

International Air Transportation Association – Not Regulated

---

## Section 15 - Regulatory Information

---



**SARA Hazard Classifications \* Acute, Chronic**

State Right To Know					
Component	CAS	MA	MN	NJ	PA
Dimmethyl Polysiloxane	70131-67-8	Yes	Yes	Yes	Yes
Silica Quartz	7631-86-9	Yes	Yes	Yes	Yes
Polydimethyl Siloxane	63148-62-9	Yes	Yes	Yes	Yes
Methyltrimethyl Siloxane	22984-54-9	Yes	Yes	Yes	Yes
Titanium Dioxide	13463-67-7	Yes	Yes	Yes	Yes
Aminopropyl Trimethoxy Silane	13822-56-5	Yes	Yes	Yes	Yes

Inventory			
Component	CAS	EU EINECS	TSCA
Dimmethyl Polysiloxe	70131-67-8	Yes	Yes
Silica Quartz	7631-86-9	Yes	Yes
Polydimethyl Siloxane	63148-62-9	Yes	Yes
Methyltrimethyl Siloxane	22984-54-9	Yes	Yes
Titanium Dioxide	13463-67-7	Yes	Yes
Aminopropyl Trimethoxy Silane	13822-56-5	Yes	Yes

**Canada**

**Labor**

**Canada - WHMIS - Classifications of Substances**

Dimmethyl Polysiloxe 70131-67-8 D2B  
 Silica Quartz 7631-86-9 D2B  
 Methyltrimethyl Siloxane 22984-54-9 D2B  
 Titanium Dioxide 13463-67-7 D2A

**United States**

**Environment**

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

Silica Quartz 7631-86-9  
 Polydimethyl Siloxane 63148-62-9  
 Methyltrimethyl Siloxane 22984-54-9

**United States - California**

**Environment**

**U.S. - California - Proposition 65 - Carcinogens List**

Polydimethyl Siloxane 63148-62-9

**United States - Rhode Island**

**Labor**

**U.S. - Rhode Island - Hazardous Substance List**

Titanium Dioxide 13463-67-7  
 Aminopropyl Trimethoxy Silane 13822-56-5

**Other Information**

\* **WARNING:** This product contains a chemical known to the State of California to cause cancer.

---

**Section 16 - Other Information**

---

**Preparation Date**

\* 4/26/2016

**Last Revision Date**

\* 4/26/2016

**Disclaimer/Statement of Liability**

\* This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the users responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.



# AP 581

## ARMOR FLASH™ SILICONE PATCH & SEALANT

### DATA SHEET

**COMPLIANCE:** ASTM C 920

**DESCRIPTION:** APOC® Armor Flash™ 100% Silicone Patch & Sealant is a high performance repair product for use in roofing & waterproofing applications. Armor Flash is highly flexible and can be used to seal flashings, curbs, penetrations, seams, HVAC Units and many other types of repairs. Armor Flash provides excellent adhesion to most common building materials and will withstand extreme weathering. Armor Flash is ideal for the contractor that demands maximum performance, ease of use and innovative technologies that benefit our workplace and our environment.

**APPLICATION:** For exterior use only. Armor Flash can be applied using a brush, trowel or bulk caulking gun. This product is ideal for almost any sealant or repair application. Surfaces must be clean, dry and free from grease and oils prior to application. Damp or wet surfaces will result in adhesion issues or blisters. Metals must be degreased with a suitable solvent. For best results, apply when air and surface temperatures are 40 °F and rising. Apply at a rate of 12.5 sq. ft. per gallon. Three coursing is recommended on all repairs. Roofing granules may be embedded in top layer of sealant for aesthetics. Skins over in 1 - 2 hours and fully cures in 24 - 36 hours at 70 °F & 50% relative humidity. Lower humidity, thicker films, poor air flow and lower temperatures will increase dry times. This product is designed to be used with Silicone based coatings. Because it is a silicone based patching compound, other chemistries such as acrylic will not bond to this product. Verify compatibility prior to coating. Clean with xylene. For Professional Use Only.

**HANDLING PRECAUTIONS:** Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use and for physical and health hazard information. Material safety data sheets are available on the APOC website at [www.apoc.com](http://www.apoc.com). You can also obtain a copy from your local APOC Distributor or APOC sales representative.

©2016 Gardner-Gibson, Inc.  
 Manufactured by / Fabricado por:  
 Gardner-Gibson, Inc.  
 P.O. Box 5449, Tampa, FL 33675

See SDS for more information

**TYPICAL PHYSICAL & PERFORMANCE CHARACTERISTICS:**

Weight Per Gallon	12.3 - 12.8 lbs./gal.
Color	White
Tensile Strength	300 psi
Elongation	500%
Tool Application	Trowel or Brush
Skin Time (50% Relative Humidity, 70 °F)	30 min
Full Cure 1/4" (50% Relative Humidity, 70 °F)	3 - 7 days
Application Temperatures	40 °F - 110 °F
Flash Point	> 450 °F

**Approx. Shipping Weights:** (Note: All approx. weights include container)

2 gallon (7.57 L)	27.5 lbs
-------------------	----------

**LIMITED WARRANTY AND DISCLAIMER:** For information on the APOC Roofing Systems, Corp.'s ("APOC") extended warranty program, visit [www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo). To be eligible for APOC's extended warranty program, all registration forms and requirements must be completed within sixty (60) days of the original date of purchase. APOC hereby warrants to the original purchaser, contingent upon original proof of purchase, that this product will be free from any and all manufacturing defects that may materially and adversely affect the product's performance for a period of one (1) year from the date of original purchase ("Warranty Period"). Should a manufacturing defect materially and adversely affect this product's performance, APOC shall, within its sole discretion and upon receipt of Purchaser's timely written notice within the Warranty Period, provide replacement product(s) or refund the purchase price of the defective product. THIS LIMITED WARRANTY IS PURCHASER'S EXCLUSIVE REMEDY AND SUPERCEDES AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This limited warranty does not cover labor or installation costs, consequential damages or incidental damages. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Direct all warranty claims in writing, along with original proof of purchase, to APOC, c/o Warranty Claims Department, P.O. Box 5449, Tampa, FL 33675. The exclusive venue for any legal action arising out of the purchase of this product or this warranty shall be had in a court of competent jurisdiction within Hillsborough County, Florida. Florida law shall govern. For additional information, visit [www.apoc.com](http://www.apoc.com).





## Section 1 - Product and Company Identification

- Material Name** • Asphalt Primer
- Chemical Category** • Mixture
- Product Code** • AP-1031
- Product Description** • Black, non-fibered liquid asphalt roof primer.
- Product Use** • Primer coating used in asphalt roofing applications.

**Manufacturer** • APOC  
4161 E. 7th Avenue  
Tampa, FL 33605  
United States

### Telephone

**Technical** • 813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time

**Emergency** • 800-424-9300 - CHEMTREC

**Emergency** • 703-527-3887 - CHEMTREC (Outside US)

Last Revision Date • 12/10/2014

## Section 2 - Hazards Identification

### GHS HAZARDS AND PRECAUTIONS

#### SIGNAL WORD: WARNING!

*Flammable liquid and vapor. Contains Combustible Petroleum Distillates. Harmful or Fatal if swallowed. Keep away from heat, sparks, and open flame. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage, respiratory tract irritation, dizziness, or loss of consciousness. May cause skin and eye irritation.*

- Prevention** Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, gas, mist, vapors and/or spray. Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. Wear protective gloves-Neoprene or Nitrile, clothing -that covers the skin, and eye/face protection -Safety Glasses. Keep out of reach of children.
- Response** IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
- Storage/Disposal** Store in a closed container. Store in a well-ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



- Physical Form** • Liquid
- Color** • Black
- Odor** • Mild Hydrocarbon.
- Flash Point** • 105°F (Closed Cup)

- OSHA(HCS2012)** • Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2, Carcinogenicity - Category 1A
- WHMIS** • Combustible Liquids - B3, Other Toxic Effects - D2A
- GHS** • Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2, Carcinogenicity - Category 1A

**Potential Health Effects**

**Inhalation**

- Acute (Immediate)** • May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.
- Chronic (Delayed)** • Refer to other information found in Section 11-Toxicology.

**Skin**

- Acute (Immediate)** • May cause irritation.
- Chronic (Delayed)** • Repeated and prolonged exposure may be harmful. Repeated and prolonged exposure may cause dermatitis.

**Eye**

- Acute (Immediate)** • May cause irritation. May cause burning and redness or swelling of the eyes.
- Chronic (Delayed)** • Repeated and prolonged exposure may cause irritation.

**Ingestion**

- Acute (Immediate)** • May be harmful or fatal if swallowed.
- Chronic (Delayed)** • Repeated and prolonged exposure may be harmful.

- Carcinogenic Effects** • This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 - Toxicological Information for more details.

<b>Carcinogenic Effects</b>			
	<b>CAS</b>	<b>IARC</b>	<b>NTP</b>
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Under Consideration

**Section 3 - Composition/Information on Ingredients**

<b>Hazardous Components</b>					
<b>Chemical Name</b>	<b>Identifiers</b>	<b>%(weight)</b>	<b>LD50/LC50</b>	<b>Classifications According to Regulation/Directive</b>	<b>Comments</b>
Asphalt	CAS:8052-42-4 UN:NA1999 EINECS:232-490-9	50% TO 70%	Ingestion/Oral-Rat LD50 >5000 mg/kg Inhalation-Rat LC50 >94.4 mg/m <sup>3</sup>	OSHA:Carc.; Irrit. WHMIS:Other Toxic Effects - D2A UN GHS:Carc. 2; Eye Irrit. 2A; Skin Irrit. 2	
Mineral Spirits	CAS:8052-41-3 EC Number:232-489-3 EINECS:232-489-3	30% TO 40%			
1,2,4-Trimethylbenzene	CAS:95-63-6 EC Number:202-436-9 EINECS:202-436-9	0.1% TO 1.5%	Ingestion/Oral-Rat LD50 5 g/kg Inhalation-Rat LC50 18000 mg/m <sup>3</sup> 4 Hour(s)	OSHA:Comb. Liq.; Irrit. UN GHS:Acute Tox. 4 (Inhalation); Aquatic Chronic 2; Flam. Liq. 3; Eye Irrit. 2A; Skin Irrit. 2; STOT RE 2; STOT SE 2	
Benzene, 1,3,5-trimethyl	CAS:108-67-8 EC Number:203-604-4 UN:UN2325 EINECS:203-604-4	0.1% TO 1.5%		OSHA: EU DSD/DPD:R10Xi; R37N; R51 R53	

## Section 4 - First Aid Measures

- Inhalation** • IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Call a physician or poison control center.
- Skin** • Rinse skin immediately with plenty of water for 15-20 minutes. Remove contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention. Wash clothing before reuse.
- Eye** • 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.
- Ingestion** • If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

## Section 5 - Fire Fighting Measures

- Extinguishing Media** • LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical, CO<sub>2</sub>, water spray or regular foam.
- Unsuitable Extinguishing Media** • Do not use direct stream of water.
- Firefighting Procedures** • Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.
- Unusual Fire and Explosion Hazards** • Combustible liquid.  
Containers may explode when heated.  
May release irritating or toxic gases, fumes, or vapors.
- Hazardous Combustion Products** • Carbon monoxide, carbon dioxide, hydrocarbons.
- Protection of Firefighters** • Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
- Flash Point** • 105°F(40.56°C) CC (Closed Cup)
- Explosion Limits** •
- Upper** • 6 %
- Lower** • .9 %
- Autoignition Temperature** • 450 F(232.2222 C)

## Section 6 - Accidental Release Measures

- Personal Precautions** • Do not move damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation to remove vapors, fumes, dust etc. Stay upwind.
- Emergency Procedures** • ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up. Ventilate closed spaces before entering.
- Environmental Precautions** • Prevent entry into waterways, sewers, basements or confined areas. Prevent spreading of vapors through sewers, ventilation systems and confined areas.
- Containment/Clean-up Measures** • Contain and recover liquid when possible. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not use water to flush spill area. Use appropriate Personal Protective Equipment (PPE)
- Prohibited Materials** • Avoid contact with strong oxidizing agents or bases.

## Section 7 - Handling and Storage

- Handling** • KEEP OUT OF THE REACH OF CHILDREN! Keep away from heat, sparks, and flame – No Smoking. Keep containers tightly closed when not in use. Do not use in areas without adequate ventilation. Protect building inlet from vapors.
- Storage** • Store in a well-ventilated place. Keep container tightly closed. Keep away from incompatible materials. Keep away from sources of ignition – No Smoking.
- Special Packaging Materials** • Not Applicable.
- Incompatible Materials or Ignition Sources** • Avoid contact with strong oxidizing agents and acids.

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

#### Pictograms



- Respiratory** • If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard. In case of insufficient ventilation, wear suitable respiratory equipment.
- Eye/Face** • Wear ANSI approved safety glasses with side shields or safety goggles.
- Hands** • Wear chemical protective gloves made of Nitrile or Neoprene.
- Skin/Body** • Wear clothing that covers the skin to prevent skin exposure.
- General Industrial Hygiene Considerations** • Avoid contact with skin and eyes. Avoid breathing vapors. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.
- Engineering Measures/Controls** • Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

### Exposure Limits/Guidelines

	Result	ACGIH	Canada Ontario	Mexico	OSHA	United States - California
Mineral Spirits (8052-41-3)	TWAs	100 ppm TWA	525 mg/m <sup>3</sup> TWAEV	100 ppm TWA; 523 mg/m <sup>3</sup> TWA	500 ppm TWA; 2900 mg/m <sup>3</sup> TWA	100 ppm PEL; 525 mg/m <sup>3</sup> PEL
Asphalt (8052-42-4)	TWAs	0.5 mg/m <sup>3</sup> TWA (as benzene soluble aerosol, fume, inhalable fraction)	0.5 mg/m <sup>3</sup> TWAEV (fume, inhalable, as benzene-soluble aerosol)	5 mg/m <sup>3</sup> TWA	Not established	5 mg/m <sup>3</sup> PEL (fume)

### Exposure Control Notations

#### ACGIH

Asphalt (8052-42-4): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free))

#### Key to abbreviations

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

## Section 9 - Physical and Chemical Properties

### Material Description

Physical Form	Liquid	Appearance/Description	Black Liquid.
Color	Black	Odor	Mild Hydrocarbon.
Odor Threshold	No data available	Physical and Chemical Properties	Liquid

### General Properties

Boiling Point	315 to 550 F(157.2222 to 287.7778 C)	Melting Point	No data available
pH	No data available	Specific Gravity/Relative	0.932 Water=1

		<b>Density</b>	
<b>Density</b>	7.8 lbs/gal	<b>Bulk Density</b>	No data available
<b>Water Solubility</b>	No data available	<b>Solvent Solubility</b>	No data available
<b>Viscosity</b>	See TDS		
<b>Volatility</b>			
<b>Vapor Pressure</b>	2 mmHg (torr) @ 68 F(20 C)	<b>Vapor Density</b>	4.9 Air=1
<b>Evaporation Rate</b>	1 Ether = 1	<b>VOC (Wt.)</b>	No data available
<b>VOC (Vol.)</b>	< 350 g/L	<b>Volatiles (Wt.)</b>	No data available
<b>Volatiles (Vol.)</b>	No data available		
<b>Flammability</b>			
<b>Flash Point</b>	105°FCC (Closed Cup)	<b>UEL</b>	6 %
<b>LEL</b>	.9 %	<b>Autoignition</b>	450°F(232°C)

## Section 10 - Stability and Reactivity

- Stability** • Stable under normal temperatures and pressures.
- Hazardous Polymerization** • Hazardous polymerization not indicated.
- Conditions to Avoid** • Avoid contact with strong oxidizing agents and flame.
- Incompatible Materials** • Strong oxidizers and acids.
- Hazardous Decomposition Products** • Carbon monoxide, carbon dioxide and hydrocarbons.

## Section 11 - Toxicological Information

Component Name	CAS	Data
Asphalt (50% TO 70%)	8052-42-4	<b>Acute Toxicity:</b> orl-rat LD50:>5000 mg/kg; ihl-rat LC50:>94.4 mg/m3; <b>Mutagen:</b> dna-mus-skn 600 mg/kg; <b>Tumorigen/Carcinogen:</b> skn-mus TDLo:905 gm/kg/2Y-I
1,2,4-Trimethylbenzene (0.1% TO 1.5%)	95-63-6	<b>Acute Toxicity:</b> orl-rat LD50:5 gm/kg; ihl-rat LC50:18000 mg/m3/4H
Benzene, 1,3,5-trimethyl (0.1% TO 1.5%)	108-67-8	<b>Acute Toxicity:</b> orl-rat LD50:5000 mg/kg; ihl-rat TCLo:100 ppm/6H/20D-I

- Other Information** • This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation in recent studies. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage. If this product is heated to extreme temperature, it may release bituminous fumes that have recently shown as probable human carcinogen by IARC.

## Section 12 - Ecological Information

- Ecological Fate** • No data available.
- Persistence/Degradability** • No data available.
- Bioaccumulation Potential** • No data available.
- Mobility in Soil** • No data available.



## Section 13 - Disposal Considerations

Product • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transportation Information

### DOT - United States - Department of Transportation

Shipping Name: Not restricted if shipped in containers <450L (119 gallons).

Restricted if shipped in containers > 450 L (119 gallons)

ID Number: NA1993

Hazard Class: 3

Packing Group: III

### TDG - Canada - Transport of Dangerous Goods

Shipping Name: Tars liquid

ID Number: UN 1999

Hazard Class: 3

Packing Group: III

TDG Additional Information: 1.33 Class 3, Flammable Liquids: Not Restricted under General Exemption for small container packaging.

IMO/IMDG -International Maritime Transport: Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.

IATA - International Air Transportation Association - TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III.

## Section 15 - Regulatory Information

SARA Hazard Classifications • Acute, Chronic

Risk & Safety Phrases • California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

State Right To Know				
Component	CAS	MA	NJ	PA
Asphalt	8052-42-4	Yes	Yes	Yes
Mineral Spirits	8052-41-3	Yes	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	No	No

Inventory			
Component	CAS	EU EINECS	TSCA
Asphalt	8052-42-4	Yes	Yes
Mineral Spirits	8052-41-3	Yes	Yes
1,2,4-Trimethylbenzene	95-63-6	Yes	Yes
Benzene, 1,3,5-trimethyl	108-67-8	Yes	Yes

### Canada

#### Labor

Canada - WHMIS - Classifications of Substances

Asphalt 8052-42-4 50% TO 70% Not Listed

1,2,4-Trimethylbenzene 95-63-6 0.1% TO 1.5% B3



# AP 103

## PREMIUM ASPHALT PRIMER DATA SHEET

**COMPLIANCE:** Exceeds performance requirements of ASTM D41. MIAMI-DADE APPROVED. ASBESTOS FREE.

**DESCRIPTION:** APOC® 103 Premium Asphalt Primer is a professional grade primer formulated with a high penetrating solvent and select asphalt. It is designed to promote superior adhesion of roofing materials. APOC® 103 can be used to prime newly laid concrete or cement decks, gypsum, masonry thermal insulation and weathered roofing prior to applying built-up roofing. APOC® 103 can also be applied to weathered roofing prior to application of black or reflective coatings. Allow primer to cure 30 days prior to application of reflective coatings.

**PREPARATION:** All surfaces must have proper drainage and be clean, dry and free of surface rust and any other foreign matter. Repair all problem areas with an approved APOC® Cement. MIX THOROUGHLY. DO NOT HEAT OR THIN. DO NOT APPLY IF RAIN IS EXPECTED WITHIN 24 HOURS.

**FOR BEST RESULTS:** Apply on clear sunny day when surface temperatures are between 35 °F and 120 °F. In colder weather product should be stored in heated room (65 °F to 80 °F) at least 24 hours prior to application.

**APPLICATION:** For exterior use only. Protective clothing, gloves, and eyewear should be used during application of these products. Apply with professional airless sprayer, brush or roller.

**APPLICATION RATE:** 0.25 - 1 gallon per 100 sq. ft. depending on porosity of surface and method of application. Work material to a smooth and even consistency. Avoid excessive build up or puddles of primer. DO NOT APPLY TO ASPHALT DRIVEWAYS.

**SPRAY INFO:** 100 - 500 PSI, .019 - .031 Tip Size, 0.5 - 2.0 GPM

**STORAGE & HANDLING PRECAUTIONS:** When transporting this product, ensure that lid is tight and pail secure and upright. Do not allow pail to tumble as this may cause lid to loosen and leakage to occur. Do not transport on passenger seats or inside the passenger compartment of any vehicle. Store product in the cargo area of vehicle, and secure over protective cloths to prevent damage due to accidental spills. Do not store at temperatures above 110 °F. This manufacturer also disclaims liability for flat surface application where poor drainage or moisture may prevail. Do not reuse empty containers. Do not use in drinking water or food systems.

**CLEAN-UP:** Clean tools with paint thinner or mineral spirits.

©2010 Gardner-Gibson, Inc.  
Manufactured by / Fabricado por: Gardner-Gibson, Inc.P.O.  
Box 5449, Tampa, FL 33675

See SDS for more info

### TYPICAL PHYSICAL & PERFORMANCE CHARACTERISTICS:

Weight Per Gallon	7.4-7.9 lbs.
Residue by Evaporation, %	60 min.
Consistency	Brush or Spray
Tack Time (50% Relative Humidity, 70 °F)	30 minutes
Full Cure (50% Relative Humidity, 70 °F)	24-48 hours
Application Temperatures	35° - 120°F
Clean-up Tools	Paint Thinner, Mineral Spirits

### Approx. Shipping Weights: (Note: All approx. weights include container)

1 gallon (3.4 L)	8 lbs.
5 gallons (18.9L)	40 lbs.
55 drums (208.2L)	460 lbs.

**VOC: 350 g/L (regulatory)**

**HANDLING PRECAUTIONS:** Product safety information required for safe use is not included. Before handling, read product safety data sheets and container labels for safe use and for physical and health hazard information. Safety data sheets are available on the APOC website at [www.apoc.com](http://www.apoc.com). You can also obtain a copy from your local APOC Distributor or APOC sales representative.

**LIMITED WARRANTY AND DISCLAIMER:** To the best of our knowledge, the technical data contained herein is true and accurate at the date of issuance and is subject to change without prior notice. User must contact APOC to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Liability, if any, is limited to replacement of product unless installed by an approved contractor in accordance with APOC warranty procedures and program.

For limited warranty and disclaimer information, visit our website at:  
[www.apoc.com/productwarrantyinfo](http://www.apoc.com/productwarrantyinfo).



# Low-VOC Bonding Adhesive 1168



## Overview

Low-VOC Bonding Adhesive 1168 is a high-strength, solvent-based contact adhesive that allows bonding of EPDM and TPO membrane to various porous and non-porous substrates. This product meets the < 250 gpt VOC content requirements of the SCAQMD 1168 Model Rule for Single-Ply Roofing Adhesives. Low-VOC Bonding Adhesive 1168 is compatible with polyisocyanurate insulation, structural and lightweight concrete, plywood, oriented strand board, wood fiberboard, SECTROCK®, masonry and various metal finishes. Low-VOC Bonding Adhesive 1168 is easily applied with a 9" (228 mm) medium nap roller to create a strong adhesive bond between the membrane and substrate.

This product complies with the following California counties' VOC regulations: Alameda, Contra Costa, El Dorado, Los Angeles, Marin, Napa, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Mateo, Santa Clara, Solano, Sonoma and Tehama.

## Features and Benefits

- High-strength adhesive that enables quick bonding
- Easily applied with a medium nap roller
- Excellent adhesion between substrates and membranes

## Mixing

Stir thoroughly until all colored pigments are dispersed and the adhesive is uniform in color. Maximum 5 minutes stirring is recommended.

## Coverage Rate

60 square feet (5.6 m<sup>2</sup>) per gallon of finished surface. Coverage rates are average and may vary due to conditions on the jobsite. Porous surfaces, especially walls, and substrates may require more bonding adhesive than the typical coverage rate.

## Application

1. The surface, on or against which adhesive is to be applied, shall be clean, smooth, dry and free of film, sharp edges, loose and foreign materials, oil and grease. Depressions greater than ¼" (6 mm) should be feathered using epoxy, mortar or other approved patching material. All sharp projections shall be removed by sweeping, blowing or vacuum cleaning.
2. After thorough stirring (minimum 5 minutes), apply Low-VOC Bonding Adhesive 1168 to substrate and membrane using a 9" (228 mm) medium nap roller. Application shall be continuous and uniform, avoiding globs or puddles. Low-VOC Bonding Adhesive 1168 must be allowed to flash off until it does not string or stick to a dry finger touch. Any coated area, which has been exposed to rain, should be allowed to dry and then recoated. Do not apply adhesive to splice areas to be hot-air welded. Do not apply adhesive to splice areas or use in conjunction with Carlisle's pressure-sensitive tapes.
3. Roll the membrane onto the adhesive-coated substrate while avoiding wrinkles. Immediately brush down the bonded portion of the sheet with a soft bristle push broom to achieve maximum contact. In some applications, swelling of the membrane may occur initially, but this will disappear after several days or exposure. Do not re-croom membrane in an attempt to remove swelling.

*Note: This adhesive may be slightly thicker than standard Low-VOC Bonding Adhesive and may require longer drying time.*

*Review Carlisle specifications and details for complete installation information.*

# Low-VOC Bonding Adhesive 1168

## Precautions

- Review the applicable Material Safety Data Sheet for complete safety information prior to use.
- Bonding Adhesives are **EXTREMELY FLAMMABLE**. They contain materials that are a dangerous fire and explosion hazard when exposed to heat, flame or sparks. Store and use away from all sources of heat, flame or sparks. Do not smoke while applying. Do not use in a confined or unventilated area. Vapors are heavier than air and may travel along ground to a distant ignition source and flash back. A red caution label is required when shipping.
- During application, efforts must be made to prevent fumes from entering the building via air ventilation ducts. Do not place open containers or mix adhesive near fresh air intake units. When possible, shut down or seal off the closest units.
- Avoid breathing vapors. Keep container closed when not in use. Use with adequate ventilation. If inhaled, remove to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.
- If swallowed, DO NOT INDUCE VOMITING. Call a physician immediately.
- Avoid contact with eyes. Safety glasses or goggles are recommended. If splashed in eyes, immediately flush eyes with plenty of water for at least 15 minutes. Contact a physician immediately.
- Avoid contact with skin. Wash hands thoroughly after handling. In case of contact with skin, thoroughly wash affected area with soap and water.  
*Note: Permeation-resistant gloves that meet ANSI/ISGA 105-2005 are recommended to be worn when using this product to protect hands from irritating ingredients.*
- Do not thin Bonding Adhesive. Thinning will affect performance.
- Job site storage temperatures in excess of 90°F (32°C) may affect product shelf life. Do not store sealed containers on roof for extended periods of time. Should the Bonding Adhesive be stored at temperatures below 60°F (15°C), restore to room temperature prior to use.
- Open containers of Bonding Adhesive should be used within 48 hours. The adhesive will begin to thicken after this time, making it difficult and eventually impossible to control adhesive consistency.
- KEEP OUT OF THE REACH OF CHILDREN.

## Typical Properties and Characteristics

Base	Synthetic Rubber
Color	Yellow
Solids	21.0%
VOC	750 g/l max
Flash Point	0°F (-17°C) Closed Cup
Brookfield Viscosity	5,000 Centipoise
Average Wet Weight	10.5 lbs/gal (1.3 kg/ltr)
Packaging	5-gal Pail
Shelf Life	1 Year

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification or specification range for any particular property of this product.



Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

---

Sección 1 - PRODUCTO E IDENTIFICACIÓN DE LA COMPAÑÍA

---

**Nombre del material**

Adhesivo de unión de bajo VOC 1168

**Sinónimos**

Adhesivo

**Familia química**

Adhesivo

**Uso del producto**

Adhesivo de contacto de bajo VOC

**Restricciones de uso**

Solo para uso industrial.

**Información sobre el fabricante**

Carlisle SynTec

1285 Ritner Highway

Carlisle, PA 17013

USA

Teléfono: +1-800-479-6832

Número telefónico para casos de emergencia: +1-800-424-9300 (CHEMTREC)

---

Sección 2 - IDENTIFICACIÓN DE PELIGROS

---

**Clasificación de acuerdo con el párrafo (d) de 29 CFR 1910.1200.**

Líquidos inflamables: Categoría 2

Peligro de aspiración: Categoría 1

Daño grave/irritación en los ojos: Categoría 2A

Sensibilización de la piel: Categoría 1A

Carcinogenicidad - Categoría 2

Toxicidad para órganos afectados específicos - exposición única: Categoría 1 (sistema nervioso central)

Toxicidad para órganos afectados específicos - exposición única: Categoría 3

Toxicidad para órganos afectados específicos - exposición repetida: Categoría 1 (sistema nervioso central)

Toxicidad para órganos afectados específicos - exposición repetida: Categoría 2 (sangre)

**Elementos de etiquetas GHS**

**Símbolo(s)**



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

### Palabra clave

Peligro

### Declaración(es) de riesgo

Líquido y vapor altamente inflamables.  
Puede ser mortal si se ingiere o ingresa a las vías respiratorias.  
Provoca irritación grave en los ojos.  
Puede causar una reacción alérgica en la piel.  
Se sospecha que causa cáncer.  
Causa daños a órganos.  
Puede provocar somnolencia y mareos.  
Puede causar daños a órganos debido a exposición prolongada o repetida.  
Puede causar daños a órganos debido a exposición prolongada o repetida.

### Declaración(es) de precaución

#### Prevención

Obtenga instrucciones especiales antes de usar.  
No utilice el producto hasta que se hayan leído y entendido las precauciones de seguridad.  
Mantenga el envase bien cerrado.  
Mantenga el producto alejado del calor, chispas, llamas abiertas y superficies calientes. No fumar.  
Realice una puesta a tierra o masa del envase y del equipo receptor.  
Utilice equipos eléctricos, de ventilación y de iluminación a prueba de explosiones.  
Tome medidas de precaución contra descarga estática.  
Utilice herramientas que no generen chispas.  
Utilice únicamente en el exterior o en un área con buena ventilación.  
Use guantes protectores, ropa protectora, protección de ojos y protección facial.  
No inhale polvo, humo, gas, vaho, vapores o spray.  
Lávese concienzudamente después de la manipulación.  
No permita que salga ropa de trabajo contaminada del lugar de trabajo.  
No coma, beba ni fume mientras usa este producto.

#### Respuesta

En caso de incendio: use los medios de extinción adecuados.  
Si resulta expuesto: llame a un CENTRO DE TOXICOLOGÍA o a un médico.  
EN CASO DE INHALACIÓN: lleve la persona al aire fresco y haga que descansa en una posición cómoda para respirar  
Llame a un CENTRO DE TOXICOLOGÍA o a un médico si se siente mal.  
SI ENTRA EN CONTACTO CON LOS OJOS: enjuague cuidadosamente con agua durante varios minutos. Quítese los lentes de contacto, si están presentes y son fáciles de quitar. Siga enjuagando.  
Si persiste la irritación de los ojos: obtenga asesoramiento o atención médica.  
SI ENTRA EN CONTACTO CON LA PIEL (o el cabello): quítese/retire de inmediato toda la ropa contaminada. Enjuague la piel con agua o bajo la ducha.  
Si se produce irritación o erupción cutánea: obtenga asesoramiento o atención médica.  
Lave la ropa contaminada antes de volver a usar.  
SI SE INGIERE: llame inmediatamente a un CENTRO DE TOXICOLOGÍA o a un médico.  
NO induzca el vómito.  
Tratamiento específico (consulte la etiqueta).

## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

**Almacenamiento**

Almacene el producto en un lugar bien ventilado. Mantenga el envase bien cerrado.  
Mantenga el producto a temperaturas frescas.  
Guarde bajo llave.

**Desechos**

Deseche el contenido y el recipiente de acuerdo a las regulaciones locales, regionales, nacionales e internacionales.

**Otros peligros**

No hay información adicional disponible.

---

**Sección 3 - COMPOSICIÓN/INFORMACIÓN SOBRE LOS INGREDIENTES**

---

CAS	Nombre del componente	Porcentaje
Mezcla	Polipropileno clorado	0.1-1
Secreto comercial	Antioxidante polifenol	0.1-1
1309-48-4	Óxido de magnesio	0.1-1
1314-13-2	Óxido de zinc	0.1-1
Secreto comercial	Resina fenólica reactiva al calor	1-5
108-88-3	Tolueno	3-7
67-64-1	Acetona	1-5
Mezcla	Polímero de policloropreno	10-30
98-56-6	PCBTF	60-100

---

**Sección 4 - MEDIDAS DE PRIMEROS AUXILIOS**

---

**Descripción de las medidas necesarias**

En caso de exposición o ante alguna inquietud: llame a un CENTRO DE TOXICOLOGÍA o a un médico.

**Inhalación**

Lleve a la persona al aire fresco y manténgala en una posición cómoda para respirar. Llame a un CENTRO DE TOXICOLOGÍA o a un médico si se siente mal.

**Piel**

Retire la ropa contaminada y lávela antes de volver a usar. Enjuague la piel con agua o bajo la ducha. Si se produce irritación o erupción cutánea: busque asesoramiento o atención médica.

## Hoja de datos de seguridad

**Nombre del material: Adhesivo de unión de bajo VOC 1168**

**Nº de producto: 318847**

### **Ojos**

Enjuague cuidadosamente con agua durante 15 minutos. Quítese los lentes de contacto, si están presentes y son fáciles de quitar. Siga enjuagando. Si la irritación ocular persiste, consiga asesoramiento o atención médica.

### **Ingestión**

SI SE INGIERE: llame inmediatamente a un CENTRO DE TOXICOLOGÍA o a un médico. NO induzca el vómito.

### **Indicación de necesidad de atención médica inmediata y tratamiento especial**

Brindar tratamiento sintomático y de apoyo.

### **Síntomas/efectos más importantes**

#### **Agudos**

Puede ser mortal si se ingiere o ingresa a las vías respiratorias. Provoca irritación grave en los ojos. Puede causar reacción alérgica en la piel. Causa daños en el sistema nervioso central. Puede provocar somnolencia o mareos.

#### **Retardados**

Se sospecha que causa cáncer. Causa daños a órganos debido a exposición prolongada o repetida: sistema nervioso central, sangre.

### **Notas para los médicos**

Contiene tolueno.

---

## Sección 5 - MEDIDAS PARA EXTINCIÓN DE INCENDIOS

---

### **Medios de extinción**

#### **Medios de extinción adecuados**

Polvo químico seco, espuma o dióxido de carbono. Es posible que el agua no sea eficaz.

#### **Medios de extinción no adecuados**

No utilice chorros de agua de alta presión.

### **Peligros especiales derivados de la sustancia química**

Líquido y vapor altamente inflamables. Los vapores son más pesados que el aire; pueden trasladarse distancias considerables hasta una fuente de ignición y producir un retorno de llama.

### **Productos de combustión peligrosos**

Óxidos de carbono, óxidos de nitrógeno

### **Consejos para extinción de incendios**

Mantenga el producto alejado del calor, chispas, llamas abiertas y superficies calientes. No fumar. Realice una puesta a tierra o masa del envase y del equipo receptor. Tome medidas para evitar descargas estáticas.

### **Medidas para extinción de incendios**

Use trajes protectores para combatir incendios con protección completa, incluso un equipo autónomo de respiración (SCBA, por su sigla en inglés) para protección contra la exposición potencial.

---





## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

### Sección 6 - MEDIDAS EN CASO DE EMISIONES ACCIDENTALES

#### Precauciones personales, equipo de protección y procedimientos de emergencia

Use equipos y vestimenta de protección personal, consultar la Sección 8.

#### Métodos y materiales para contención y limpieza

Elimine todas las fuentes de ignición. Evite inhalar los vapores. Ventile la zona afectada. Absórbalos con tierra, arena u otro material incombustible para luego trasladarlo a un recipiente. Contenga el derrame para su posterior eliminación. Eliminar de acuerdo a todas las regulaciones aplicables.

#### Precauciones ambientales

Evite liberarlo al medio ambiente.

### Sección 7 - MANIPULACIÓN Y ALMACENAMIENTO

#### Precauciones para manipulación segura

Obtenga instrucciones especiales antes de usar. No utilice el producto hasta que se hayan leído y entendido las precauciones de seguridad. Mantenga el envase bien cerrado. Mantenga alejado del calor, chispas, llamas abiertas y superficies calientes. No fumar. Realice una puesta a tierra o masa del envase y del equipo receptor. Use equipos a prueba de explosión. Tome medidas de precaución contra descarga estática. Utilice herramientas que no generen chispas. Utilice únicamente en el exterior o en un área con buena ventilación. Use guantes protectores, ropa protectora, protección de ojos y protección facial. Lávese meticulosamente después de la manipulación. No coma, beba ni fume mientras usa este producto. Lave la ropa contaminada antes de volver a usar. MANTÉNGALO ALEJADO DE LOS NIÑOS.

#### Condiciones de almacenamiento seguro, incluso incompatibilidades

Almacene el producto en un lugar bien ventilado. Mantenga el envase bien cerrado.

Mantenga el producto a temperaturas frescas.

Guarde bajo llave.

Mantenga el producto alejado de fuentes de calor e ignición. No corte, perforo ni suelde el envase ni cerca de él. Es posible que los envases vacíos contengan residuos del producto.

#### Materiales incompatibles

Ácidos, bases, agentes oxidantes poderosos

### Sección 8 - CONTROLES DE EXPOSICIÓN / PROTECCIÓN PERSONAL

#### Límites de exposición a componentes

Óxido de magnesio	1309-48-4
ACGIH:	10 mg/m <sup>3</sup> TWA fracción inhalable
NIOSH:	750 mg/m <sup>3</sup> IDLH vapor
OSHA (EE.UU.):	15 mg/m <sup>3</sup> TWA vapor, partículas totales



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

### Sección 1 - PRODUCTO E IDENTIFICACIÓN DE LA COMPAÑÍA

**Nombre del material**

Adhesivo de unión de bajo VOC 1168

**Sinónimos**

Adhesivo

**Familia química**

Adhesivo

**Uso del producto**

Adhesivo de contacto de bajo VOC

**Restricciones de uso**

Solo para uso industrial.

**Información sobre el fabricante**

Carlisle SynTec

1285 Ritner Highway

Carlisle, PA 17013

USA

Teléfono: +1-800-479-6832

Número telefónico para casos de emergencia: +1-800-424-9300 (CHEMTREC)

### Sección 2 - IDENTIFICACIÓN DE PELIGROS

**Clasificación de acuerdo con el párrafo (d) de 29 CFR 1910.1200.**

Líquidos inflamables: Categoría 2

Peligro de aspiración: Categoría 1

Daño grave/irritación en los ojos: Categoría 2A

Sensibilización de la piel: Categoría 1A

Carcinogenicidad - Categoría 2

Toxicidad para órganos afectados específicos - exposición única: Categoría 1 (sistema nervioso central)

Toxicidad para órganos afectados específicos - exposición única: Categoría 3

Toxicidad para órganos afectados específicos - exposición repetida: Categoría 1 (sistema nervioso central)

Toxicidad para órganos afectados específicos - exposición repetida: Categoría 2 (sangre)

**Elementos de etiquetas GHS**

**Símbolo(s)**





## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

Palabra clave

Peligro

### Declaración(es) de riesgo

Líquido y vapor altamente inflamables.

Puede ser mortal si se ingiere o ingresa a las vías respiratorias.

Provoca irritación grave en los ojos.

Puede causar una reacción alérgica en la piel.

Se sospecha que causa cáncer.

Causa daños a órganos.

Puede provocar somnolencia y mareos.

Puede causar daños a órganos debido a exposición prolongada o repetida.

Puede causar daños a órganos debido a exposición prolongada o repetida.

### Declaración(es) de precaución

#### Prevención

Obtenga instrucciones especiales antes de usar.

No utilice el producto hasta que se hayan leído y entendido las precauciones de seguridad.

Mantenga el envase bien cerrado.

Mantenga el producto alejado del calor, chispas, llamas abiertas y superficies calientes. No fumar.

Realice una puesta a tierra o masa del envase y del equipo receptor.

Utilice equipos eléctricos, de ventilación y de iluminación a prueba de explosiones.

Tome medidas de precaución contra descarga estática.

Utilice herramientas que no generen chispas.

Utilice únicamente en el exterior o en un área con buena ventilación.

Use guantes protectores, ropa protectora, protección de ojos y protección facial.

No inhale polvo, humo, gas, vaho, vapores o spray.

Lávese concienzudamente después de la manipulación.

No permita que salga ropa de trabajo contaminada del lugar de trabajo.

No coma, beba ni fume mientras usa este producto.

#### Respuesta

En caso de incendio: use los medios de extinción adecuados.

Si resulta expuesto: llame a un CENTRO DE TOXICOLOGÍA o a un médico.

EN CASO DE INHALACIÓN: lleve la persona al aire fresco y haga que descansa en una posición cómoda para respirar

Llame a un CENTRO DE TOXICOLOGÍA o a un médico si se siente mal.

SI ENTRA EN CONTACTO CON LOS OJOS: enjuague cuidadosamente con agua durante varios minutos. Quítese los lentes de contacto, si están presentes y son fáciles de quitar. Siga enjuagando.

Si persiste la irritación de los ojos: obtenga asesoramiento o atención médica.

SI ENTRA EN CONTACTO CON LA PIEL (o el cabello): quítese/retire de inmediato toda la ropa contaminada. Enjuague la piel con agua o bajo la ducha.

Si se produce irritación o erupción cutánea: obtenga asesoramiento o atención médica.

Lave la ropa contaminada antes de volver a usar.

SI SE INGIERE: llame inmediatamente a un CENTRO DE TOXICOLOGÍA o a un médico.

NO induzca el vómito.

Tratamiento específico (consulte la etiqueta).



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

### Almacenamiento

Almacene el producto en un lugar bien ventilado. Mantenga el envase bien cerrado. Mantenga el producto a temperaturas frescas. Guarde bajo llave.

### Desechos

Deseche el contenido y el recipiente de acuerdo a las regulaciones locales, regionales, nacionales e internacionales.

### Otros peligros

No hay información adicional disponible.

## Sección 3 - COMPOSICIÓN/INFORMACIÓN SOBRE LOS INGREDIENTES

CAS	Nombre del componente	Porcentaje
Mezcla	Polipropileno clorado	0.1-1
Secreto comercial	Antioxidante polifenol	0.1-1
1309-48-4	Óxido de magnesio	0.1-1
1314-13-2	Óxido de zinc	0.1-1
Secreto comercial	Resina fenólica reactiva al calor	1-5
108-88-3	Tolueno	3-7
67-64-1	Acetona	1-5
Mezcla	Polímero de policloropreno	10-30
98-56-6	PCBTF	60-100

## Sección 4 - MEDIDAS DE PRIMEROS AUXILIOS

### Descripción de las medidas necesarias

En caso de exposición o ante alguna inquietud: llame a un CENTRO DE TOXICOLOGÍA o a un médico.

### Inhalación

Lleve a la persona al aire fresco y manténgala en una posición cómoda para respirar. Llame a un CENTRO DE TOXICOLOGÍA o a un médico si se siente mal.

### Piel

Retire la ropa contaminada y lávela antes de volver a usar. Enjuague la piel con agua o bajo la ducha. Si se produce irritación o erupción cutánea: busque asesoramiento o atención médica.



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318347

### Ojos

Enjuague cuidadosamente con agua durante 15 minutos. Quítese los lentes de contacto, si están presentes y son fáciles de quitar. Siga enjuagando. Si la irritación ocular persiste, consiga asesoramiento o atención médica.

### Ingestión

SI SE INGIERE: llame inmediatamente a un CENTRO DE TOXICOLOGÍA o a un médico. NO induzca el vómito.

### Indicación de necesidad de atención médica inmediata y tratamiento especial

Brindar tratamiento sintomático y de apoyo.

### Síntomas/efectos más importantes

#### Agudos

Puede ser mortal si se ingiere o ingresa a las vías respiratorias. Provoca irritación grave en los ojos. Puede causar reacción alérgica en la piel. Causa daños en el sistema nervioso central. Puede provocar somnolencia o mareos.

#### Retardados

Se sospecha que causa cáncer. Causa daños a órganos debido a exposición prolongada o repetida: sistema nervioso central, sangre.

### Notas para los médicos

Contiene tolueno.

## Sección 5 - MEDIDAS PARA EXTINCIÓN DE INCENDIOS

### Medios de extinción

#### Medios de extinción adecuados

Polvo químico seco, espuma o dióxido de carbono. Es posible que el agua no sea eficaz.

#### Medios de extinción no adecuados

No utilice chorros de agua de alta presión.

### Peligros especiales derivados de la sustancia química

Líquido y vapor altamente inflamables. Los vapores son más pesados que el aire; pueden trasladarse distancias considerables hasta una fuente de ignición y producir un retorno de llama.

### Productos de combustión peligrosos

Óxidos de carbono, óxidos de nitrógeno

### Consejos para extinción de incendios

Mantenga el producto alejado del calor, chispas, llamas abiertas y superficies calientes. No fumar. Realice una puesta a tierra o masa del envase y del equipo receptor. Tome medidas para evitar descargas estáticas.

### Medidas para extinción de incendios

Use trajes protectores para combatir incendios con protección completa, incluso un equipo autónomo de respiración (SCBA, por su sigla en inglés) para protección contra la exposición potencial.



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

### Sección 6 - MEDIDAS EN CASO DE EMISIONES ACCIDENTALES

#### Precauciones personales, equipo de protección y procedimientos de emergencia

Use equipos y vestimenta de protección personal, consultar la Sección 8.

#### Métodos y materiales para contención y limpieza

Elimine todas las fuentes de ignición. Evite inhalar los vapores. Ventile la zona afectada. Absórbalos con tierra, arena u otro material incombustible para luego trasladarlo a un recipiente. Contenga el derrame para su posterior eliminación. Eliminar de acuerdo a todas las regulaciones aplicables.

#### Precauciones ambientales

Evite liberarlo al medio ambiente.

### Sección 7 - MANIPULACIÓN Y ALMACENAMIENTO

#### Precauciones para manipulación segura

Obtenga instrucciones especiales antes de usar. No utilice el producto hasta que se hayan leído y entendido las precauciones de seguridad. Mantenga el envase bien cerrado. Mantenga alejado del calor, chispas, llamas abiertas y superficies calientes. No fumar. Realice una puesta a tierra o masa del envase y del equipo receptor. Use equipos a prueba de explosión. Tome medidas de precaución contra descarga estática. Utilice herramientas que no generen chispas. Utilice únicamente en el exterior o en un área con buena ventilación. Use guantes protectores, ropa protectora, protección de ojos y protección facial. Lávese meticulosamente después de la manipulación. No coma, beba ni fume mientras usa este producto. Lave la ropa contaminada antes de volver a usar. **MANTÉNGALO ALEJADO DE LOS NIÑOS.**

#### Condiciones de almacenamiento seguro, incluso incompatibilidades

Almacene el producto en un lugar bien ventilado. Mantenga el envase bien cerrado. Mantenga el producto a temperaturas frescas. Guarde bajo llave.

Mantenga el producto alejado de fuentes de calor e ignición. No corte, perforo ni suelde el envase ni cerca de él. Es posible que los envases vacíos contengan residuos del producto.

#### Materiales incompatibles

Ácidos, bases, agentes oxidantes poderosos

### Sección 8 - CONTROLES DE EXPOSICIÓN / PROTECCIÓN PERSONAL

#### Límites de exposición a componentes

Óxido de magnesio	1309-48-4
ACGIH:	10 mg/m3 TWA fracción inhalable
NIOSH:	750 mg/m3 IDLH vapor
OSHA (EE.UU.):	15 mg/m3 TWA vapor, partículas totales

## Hoja de datos de seguridad

**Nombre del material: Adhesivo de unión de bajo VOC 1168**

**Nº de producto: 318847**

México:	10 mg/m3 TWA LMPE-PPT como vapor de Mg	
<b>Óxido de zinc</b>	1314-13-2	
ACGIH:	2 mg/m3 TWA fracción respirable	10 mg/m3 STEL fracción respirable
NIOSH:	5 mg/m3 TWA polvo y vapor	10 mg/m3 STEL vapor
	15 mg/m3 límite máximo de polvo	500 mg/m3 IDLH
OSHA (EE.UU.):	5 mg/m3 TWA vapor; 15 mg/m3 TWA polvo total; 5 mg/m3 TWA fracción respirable	
México:	5 mg/m3 TWA LMPE-PPT vapor; 10 mg/m3 TWA LMPE-PPT polvo	
	10 mg/m3 STEL [LMPE-CT] vapor	
<b>Tolueno</b>	108-88-3	
ACGIH:	20 ppm TWA	
NIOSH:	100 ppm TWA; 375 mg/m3 TWA	150 ppm STEL; 560 mg/m3 STEL
	500 ppm IDLH	
Europa:	50 ppm TWA; 192 mg/m3 TWA	100 ppm STEL; 384 mg/m3 STEL
	Posibilidad de absorción importante a través de la piel	
OSHA (EE.UU.):	200 ppm TWA	300 ppm límite superior
México:	50 ppm TWA LMPE-PPT; 188 mg/m3 TWA LMPE-PPT	
	Piel: potencial de absorción cutánea	
<b>Acetona</b>	67-64-1	
ACGIH:	250 ppm TWA	500 ppm STEL
NIOSH:	250 ppm TWA; 590 mg/m3 TWA	2500 ppm IDLH (10% LEL)
Europa:	500 ppm TWA; 1210 mg/m3 TWA	
OSHA (EE.UU.):	1000 ppm TWA; 2400 mg/m3 TWA	
México:	1000 ppm TWA LMPE-PPT; 2400 mg/m3 TWA LMPE-PPT	
	1260 ppm STEL [LMPE-CT]; 3000 mg/m3 STEL [LMPE-CT]	

## Hoja de datos de seguridad

**Nombre del material:** Adhesivo de unión de bajo VOC 1168

**Nº de producto:** 318847

**Valor límite biológico**

No hay valores límite biológicos para ninguno de los componentes de este producto.

**Controles de ingeniería**

Proporcionar sistema de ventilación por extracción local. Asegure el cumplimiento de los límites de exposición aplicables.

**Medidas de protección individual, como equipo de protección personal**

**Protección para ojos/cara**

Use lentes o gafas de protección con careta para evitar que las sustancias químicas entren en contacto con la piel y los ojos cuando resulte adecuado.

**Protección de la piel**

Usar vestimenta de trabajo con mangas largas. Use calzado de protección.

**Protección respiratoria**

Puede resultar adecuado utilizar un respirador purificador de aire aprobado por NIOSH con un cartucho o bote adecuado bajo ciertas circunstancias, si se espera que las concentraciones de producto en el aire superen los límites de exposición.

**Recomendaciones sobre guantes**

Use guantes adecuados y resistentes contra productos químicos.

### Sección 9 - PROPIEDADES FÍSICAS Y QUÍMICAS

<b>Apariencia</b>	Líquido amarillento	<b>Estado físico</b>	líquido
<b>Olor</b>	hidrocarburo	<b>Color</b>	amarillento
<b>Umbral de olor</b>	No disponible	<b>pH</b>	No disponible
<b>Punto de fusión</b>	(De -95 a -33 °C) de -139 a -27 °F	<b>Punto de ebullición</b>	(56 - 139 °C) 133-283 °F
<b>Punto de congelación</b>	No disponible	<b>Índice de evaporación</b>	1.2
<b>Rango de punto de ebullición</b>	No disponible	<b>Inflamabilidad (sólido, gas)</b>	No disponible
<b>Autoignición</b>	(465 °C) 869 °F	<b>Punto de inflamación</b>	(-17 °C) 0 °F
<b>Límite explosivo inferior</b>	0.9 %	<b>Descomposición</b>	No disponible
<b>Límite explosivo superior</b>	12.8 %	<b>Presión de vapor</b>	12.5 mmHg
<b>Densidad de vapor (aire=1)</b>	5.8	<b>Gravedad específica (agua=1)</b>	No disponible
<b>Solubilidad en agua</b>	Insignificante	<b>Coefficiente de partición: n-octanol/agua</b>	No disponible



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

<b>Viscosidad</b>	5000 cps	<b>Solubilidad (otros)</b>	Hidrocarburos
<b>Densidad</b>	1.13 (relativa)	<b>VOC</b>	<250 g/L

**Información adicional**

No hay información adicional disponible.

---

**Sección 10 - ESTABILIDAD Y REACTIVIDAD**

---

**Reactividad**

No se espera peligro de reactividad.

**Estabilidad química**

Estable bajo condiciones de uso normales.

**Posibilidad de reacciones peligrosas**

No ocurrirá polimerización peligrosa.

**Condiciones a evitar**

Evitar calor, llamas, chispas y otras fuentes de ignición. Evite el contacto con materiales incompatibles.

**Materiales incompatibles**

Ácidos, bases, agentes oxidantes poderosos

**Productos de descomposición peligrosos**

Óxidos de carbono, óxidos de nitrógeno

---

**Sección 11 - INFORMACIÓN TOXICOLÓGICA**

---

**Información sobre vías de exposición probables****Inhalación**

Puede provocar somnolencia o mareos.

**Contacto con la piel**

Puede causar reacción alérgica en la piel. Puede provocar irritación de la piel.

**Contacto con los ojos**

Provoca irritación grave en los ojos.

**Ingestión**

Puede ser mortal si se ingiere o ingresa a las vías respiratorias. Puede causar irritación gastrointestinal.

**Toxicidad aguda y crónica****Análisis de componentes - LD50/LC50**

Los componentes de este material se han revisado en varias fuentes y se han publicado los siguientes valores específicos seleccionados:

Polipropileno clorado (mezcla)

Oral LD50 Rata 5000 mg/kg

## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

**Antioxidante polifenol (secreto comercial)**

Oral LD50 rata >5000 mg/kg  
Cutánea LD50 conejo >5000 mg/kg  
Inhalación LC50 rata >165 mg/L 1 h

**Óxido de magnesio (1309-48-4)**

Oral LD50 Rata >5000 mg/kg

**Óxido de zinc (1314-13-2)**

Oral LD50 rata >15,000 mg/kg  
Inhalación LC50 rata >5.7 mg/L

**Tolueno (108-88-3)**

Oral LD50 rata >7000 mg/kg  
Cutánea LD50 conejo 12 - 14 g/kg  
Inhalación LC50 rata 30 - 35 mg/L

**Acetona (67-64-1)**

Oral LD50 rata 5800 mg/kg  
Cutánea LD50 cobayo >7246 mg/kg  
Inhalación LC50 rata 32,000 ppm 4 h

**Polímero de policloropreno (mezcla)**

Oral LD50 Rata >5000 mg/kg

**PCBTF (98-56-6)**

Oral LD50 rata 13 g/kg  
Cutánea LD50 conejo >2 mL/kg  
Inhalación LC50 rata 33 mg/L 4 h

**Efectos inmediatos**

Puede ser mortal si se ingiere o ingresa a las vías respiratorias. Provoca irritación grave en los ojos. Puede causar reacción alérgica en la piel. Causa daños en el sistema nervioso central. Puede provocar somnolencia o mareos.

**Efectos retardados**

Se sospecha que causa cáncer. Causa daños a órganos debido a exposición prolongada o repetida: sistema nervioso central, sangre.

**Datos sobre irritación/corrosividad**

Provoca irritación grave en los ojos.

**Sensibilización respiratoria**

No existen datos disponibles.

**Sensibilización cutánea**

Puede causar reacción alérgica en la piel.

## Hoja de datos de seguridad

**Nombre del material: Adhesivo de unión de bajo VOC 1168**

**Nº de producto: 318847**

**Carcinogenicidad de los componentes**

<b>Óxido de magnesio</b>	1309-48-4
ACGIH:	A4 - No clasificable como carcinógeno humano
<b>Tolueno</b>	108-88-3
ACGIH:	A4 - No clasificable como carcinógeno humano
IARC:	Monografía 71 [1999]; Monografía 47 [1989] (Grupo 3 (no clasificable))
<b>Acetona</b>	67-64-1
ACGIH:	A4 - No clasificable como carcinógeno humano

**Mutagenicidad de células germinales**

No existen datos disponibles.

**Toxicidad reproductiva**

No existen datos disponibles.

**Toxicidad para órganos afectados específicos - exposición única**

Sistema nervioso central

**Toxicidad para órganos afectados específicos - exposición repetida**

Sangre, sistema nervioso central

**Peligro de aspiración**

Puede ser mortal si se ingiere o ingresa a las vías respiratorias.

**Afecciones médicas agravadas por la exposición**

Puede causar reacción alérgica en la piel. La aspiración en los pulmones puede causar neumonía química.

**Datos adicionales**

No hay información adicional disponible.

### Sección 12 - INFORMACIÓN ECOLÓGICA

**Ecotoxicidad**

Evite liberarlo al medio ambiente.

**Análisis de componentes - Toxicidad acuática**

<b>Antioxidante polifenol</b>	Secreto comercial
-------------------------------	-------------------

## Hoja de datos de seguridad

**Nombre del material: Adhesivo de unión de bajo VOC 1168**

**Nº de producto: 318847**

Peces:	LC50 96 h Oncorhynchus mykiss >0.2 mg/L [semi-estático]
Algas:	EC50 72 h Pseudokirchneriella subcapitata >0.2 mg/L IUCLID
Invertebrados:	EC50 48 h Daphnia magna >0.2 mg/L IUCLID
Tolueno	108-88-3
Peces:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [continuo] (1 día); LC50 96 h Pimephales promelas 12.6 mg/L [estático]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [continuo]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [estático]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-estático]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [estático]; LC50 96 h Oryzias latipes 54 mg/L [estático]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-estático]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [estático]
Algas:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [estático] EPA
Invertebrados:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [estático] EPA; EC50 48 h Daphnia magna 11.5 mg/L IUCLID
Acetona	67-64-1
Peces:	LC50 96 h Oncorhynchus mykiss 4.74 - 6.33 mL/L; LC50 96 h Pimephales promelas 6210 - 8120 mg/L [estático]; LC50 96 h Lepomis macrochirus 8300 mg/L
Invertebrados:	EC50 48 h Daphnia magna 10,294 - 17,704 mg/L [estático] EPA; EC50 48 h Daphnia magna 12,600 - 12,700 mg/L IUCLID
PCBTF	98-56-6
Invertebrados:	EC50 48 h Daphnia magna 3.68 mg/L IUCLID

**Persistencia y degradabilidad**

No hay información disponible para el producto.

**Potencial bioacumulativo**

No hay información disponible para el producto.

**Movilidad**

No hay información disponible para el producto.

**Otra toxicidad**

No hay información adicional disponible.



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

---

### Sección 13 - CONSIDERACIONES SOBRE LA ELIMINACIÓN

---

#### Métodos de eliminación

Deseche el contenido y el recipiente de acuerdo a las regulaciones locales, regionales, nacionales o internacionales.

---

### Sección 14 - INFORMACIÓN SOBRE TRANSPORTE

---

#### Información del Departamento de Transporte (DOT) de EE.UU.:

Nombre de envío: Adhesivos

Clase de peligro: 3

Nº UN/NA: UN1133

Grupo de embalaje: II

Etiqueta(s) requerida(s): 3

Información adicional: Disposiciones especiales (172.102): 149, B52, IB2, T4, TP1, TP8

#### Información IATA:

Nº UN: UN1133

#### Información IMDG:

Nº UN: UN1133

#### Información TDG:

Nº UN: UN1133

---

### Sección 15 - INFORMACIÓN SOBRE REGLAMENTOS

---

#### Reglamentos Federales Estadounidenses

Este material contiene una o más de las siguientes sustancias químicas sujeta a los requerimientos de identificación en virtud de las leyes SARA Sección 302 (40 CFR 355 Apéndice A), SARA Sección 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b) y/o requiere un plan de seguridad de procedimiento de OSHA.

Tolueno	108-88-3
SARA 313:	1 % de nivel de concentración mínimo
CERCLA:	1000 lb final RQ; 454 kg final RQ
Acetona	67-64-1



## Hoja de datos de seguridad

**Nombre del material: Adhesivo de unión de bajo VOC 1168**

**Nº de producto: 318847**

CERCLA:	5000 lb final RQ; 2270 kg final RQ
PCBTF	98-56-6
TSCA 12b:	Sección 4 , 1 % de nivel de concentración mínimo

**SARA Sección 311/312 (40 CFR 370 Subpartes B y C)**

**Riesgo de salud agudo: Sí Riesgo de salud crónico: Sí Riesgo de incendio: Sí Presión: No**

**Reactividad: No**

### Regulaciones estatales de los EE.UU.

Los siguientes componentes aparecen en una o más de las siguientes listas estatales de sustancias peligrosas:

Componente	CAS	CA	MA	MN	NJ	PA
Óxido de magnesio	1309-48-4	Sí	Sí	Sí	Sí	Sí
Óxido de zinc	1314-13-2	Sí	Sí	Sí	Sí	Sí
Tolueno	108-88-3	Sí	Sí	Sí	Sí	Sí
Acetona	67-64-1	Sí	Sí	Sí	Sí	Sí

**La(s) siguiente(s) declaración(es) se realizan con el objetivo de cumplir con la California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) (Ley sobre agua potable inocua y tratamiento de residuos tóxicos, Proposición 65):**

**¡ADVERTENCIA!** Este producto contiene una sustancia química que, según el conocimiento del Estado de California, causa efectos nocivos sobre la reproducción y el desarrollo.

Tolueno	108-88-3
Reprod./Des. Tóxico	Toxicidad durante el desarrollo, 1/1/1991

### Lista de divulgación de ingredientes (IDL) WHMIS de Canadá

Los componentes de este material se han controlado mediante la lista de divulgación de ingredientes WHMIS de Canadá. La lista está integrada por sustancias químicas que se deben identificar en las hojas de información de seguridad de materiales, si están incluidas en productos que cumplen con los criterios WHMIS especificados en las Reglamentaciones de Productos Controlados y están presentes por encima de los límites de umbral identificados en la lista de divulgación de ingredientes (IDL).

Óxido de magnesio	1309-48-4
	1 %
Óxido de zinc	1314-13-2
	1 %
Tolueno	108-88-3
	1 %

## Hoja de datos de seguridad

**Nombre del material: Adhesivo de unión de bajo VOC 1168**

**Nº de producto: 318847**

Acetona	67-64-1
	1 %

**Análisis de componentes - Inventario**

**Polipropileno clorado (mezcla)**

EE. UU.	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Sí	DSL	No	Sí	Sí	Sí	No	Sí	No	Sí	Sí	No

**Antioxidante polifenol (secreto comercial)**

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

**Óxido de magnesio (1309-48-4)**

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

**Óxido de zinc (1314-13-2)**

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

**Tolueno (108-88-3)**

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

**Acetona (67-64-1)**

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

**Tintura amarilla (2481-94-9)**

EE. UU.	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Sí	DSL	EIN	Sí	Sí	Sí	No	Sí	No	Sí	Sí	Sí

**PCBTf (98-56-6)**

EE.	CA	EU	AU	PH	JP -	JP -	KR -	KR -	CN	NZ	MX



## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

UU.					ENCS	ISHL	KECI/KECL	TCCA			
Sí	DSL	EIN	Sí	Sí	Sí	Sí	Sí	No	Sí	Sí	No

### Sección 16 - INFORMACIÓN ADICIONAL

#### Calificación HMIS

Salud: 2\* Incendio: 3 Reactividad: 0

Escala de peligro: 0 = mínimo 1 = leve 2 = moderado 3 = grave 4 = severo \* = peligro crónico

#### Clasificaciones NFPA

Salud: 2 Incendio: 3 Reactividad: 0

Escala de peligro: 0 = mínimo 1 = leve 2 = moderado 3 = grave 4 = severo

#### Resumen de cambios

Hoja de datos de seguridad nueva: 13 de mayo de 2015

#### Clave/Leyenda

ACGIH: Conferencia Estadounidense de Higienistas industriales Gubernamentales; ADR: Acuerdo Europeo sobre Transporte; AU: Australia; BOD: demanda bioquímica de oxígeno; C: Celsius; CA: Canadá; CAS: Servicio de Resúmenes Químicos; CERCLA: Ley de responsabilidad, compensación y recuperación ambiental; CLP: clasificación, etiquetado y embalaje; CN: China; CPR: reglamentaciones sobre productos controlados; DFG: Fundación Alemana de Investigación Científica; DOT: Departamento de Transporte de EE.UU.; DSD: Directiva sobre sustancias peligrosas; DSL: Lista de sustancias nacionales; EEC: Comunidad Económica Europea; EINECS: Inventario europeo de sustancias químicas existentes comercializadas; EPA: Agencia de Protección Ambiental; EU: Unión Europea; F: Fahrenheit; IARC: Agencia Internacional para la Investigación del Cáncer; IATA: Asociación Internacional de Transporte Aéreo; ICAO: Organización de Aviación Civil Internacional; IDL: Lista de divulgación de ingredientes; IDLH: inmediatamente peligroso para la vida y la salud; IMDG: Código Marítimo Internacional de Mercancías Peligrosas; JP: Japón; Kow: coeficiente de partición octanol/agua; KR: Corea; LEL: límite explosivo interior; LLV: nivel Valor Límite; LOLI: List Of LIsts™ - Base de datos reglamentaria ChemADVISOR; MAK: valor de concentración máxima en el lugar de trabajo; MEL: límites de exposición máximos; NFPA: Asociación Nacional de Protección contra Incendios; NIOSH: Instituto Nacional para la Salud y Seguridad Ocupacional; NJTSR: Registro de Secretos Comerciales de New Jersey; NTP: Programa Nacional de Toxicología; NZ: Nueva Zelanda; OSHA: Administración de Seguridad y Salud Ocupacional; PH: Filipinas; RCRA: Ley de conservación y recuperación de recursos; REACH: Sistema integrado de registro, evaluación, autorización y restricción de sustancias químicas; RID: transporte de mercancías peligrosas por ferrocarril; SARA: Ley de reautorización y enmiendas del superfondo; STEL: límite de exposición de corto plazo; TDG: transporte de mercancías peligrosas; TSCA: Ley de control de sustancias tóxicas; TWA: promedio ponderado en el tiempo; UEL: límite explosivo superior; US: Estados Unidos de América.





## Hoja de datos de seguridad

Nombre del material: Adhesivo de unión de bajo VOC 1168

Nº de producto: 318847

### Información adicional

#### Cláusula de exención de responsabilidad:

La información contenida en el presente documento está basada en datos suministrados, y refleja nuestro mejor juicio profesional. Es posible que este producto esté parcialmente formulado con componentes comprados de otras compañías. En lo referente a la precisión de los datos o información, no se estipula, de manera explícita o implícita, ninguna garantía de comerciabilidad o idoneidad para algún uso, ni ninguna otra garantía. Los resultados obtenidos del uso de tal producto, o el uso del mismo no infringe ninguna patente, pues la información contenida aquí puede ser aplicada en condiciones de uso que están fuera de nuestro control y que tal vez no conozcamos; no nos hacemos responsables por los resultados de tal aplicación. Esta información es suministrada con la condición de que la persona que la reciba determine por cuenta propia si el material es adecuado para el uso particular que pretende darle.

---

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

---

**Material Name**

Low VOC Bonding Adhesive 1168

**Synonyms**

Bonding Adhesive

**Chemical Family**

Adhesive

**Product Use**

Low VOC Contact Adhesive

**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)

---

Section 2 - HAZARDS IDENTIFICATION

---

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

Flammable Liquids - Category 2

Aspiration Hazard - Category 1

Serious Eye Damage/Eye Irritation - Category 2A

Skin Sensitization - Category 1A

Carcinogenicity - Category 2

Specific Target Organ Toxicity - Single Exposure - Category 1 ( central nervous system )

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1 ( central nervous system )

Specific Target Organ Toxicity - Repeated Exposure - Category 2 ( blood )

**GHS Label Elements**

**Symbol(s)**



**Signal Word**



## Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

Danger

### Hazard Statement(s)

Highly flammable liquid and vapor  
May be fatal if swallowed and enters airways  
Causes serious eye irritation  
May cause allergic skin reaction  
Suspected of causing cancer  
Causes damage to organs  
May cause drowsiness or dizziness  
Causes damage to organs through prolonged or repeated exposure  
May cause damage to organs through prolonged or repeated exposure

### Precautionary Statement(s)

#### Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
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/vapours/spray  
Wash thoroughly after handling  
Contaminated work clothing must not be allowed out of the workplace  
Do not eat, drink or smoke when using this product

#### Response

In case of fire: Use appropriate media to extinguish  
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  
Call a POISON CENTER or doctor if you feel unwell  
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 or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF SWALLOWED: Immediately call a POISON CENTER/doctor  
Do NOT induce vomiting  
Specific treatment (see label)

#### Storage

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



## Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

### Disposal

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

### Other Hazards

No additional information available.

---

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

CAS	Component Name	Percent
Mixture	Chlorinated polypropylene	0.1-1
Trade Secret	Polyphenol antioxidant	0.1-1
1309-48-4	Magnesium oxide	0.1-1
1314-13-2	Zinc oxide	0.1-1
Trade Secret	Heat reactive phenolic resin	1-5
108-88-3	Toluene	3-7
67-64-1	Acetone	1-5
Mixture	Polychloroprene polymer	10-30
98-56-6	PCBTF	60-100

---

### Section 4 - FIRST AID MEASURES

---

#### Description of Necessary Measures

If exposed or concerned: Call a POISON CENTER or doctor/physician.

#### Inhalation

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

#### Skin

Remove contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation or rash occurs, seek medical advice/attention.

#### Eyes

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.



## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

**Indication of any immediate medical attention and special treatment needed**  
Treat symptomatically and supportively.

### **Most Important Symptoms/Effects**

#### **Acute**

May be fatal if swallowed and enters airways. Causes serious eye irritation. May cause allergic skin reaction. Causes damage to central nervous system. May cause drowsiness or dizziness.

#### **Delayed**

Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure: central nervous system, blood.

#### **Note to Physicians**

Contains toluene.

---

## Section 5 - FIRE FIGHTING MEASURES

---

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Dry chemical, foam or carbon dioxide. Water may be ineffective.

#### **Unsuitable Extinguishing Media**

Do not use high-pressure water streams.

### **Special Hazards Arising from the Chemical**

Highly flammable liquid and vapor. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

### **Hazardous Combustion Products**

Oxides of carbon, oxides of nitrogen

### **Advice for firefighters**

Keep away from heat/sparks/open flame/hot surfaces - No smoking. Ground/bond container and receiving equipment. Take action to prevent static discharges.

### **Fire Fighting Measures**

Wear full protective fire fighting 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. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Dike for later disposal. Dispose in accordance with all applicable regulations.



## Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

### Environmental Precautions

Avoid release to the environment.

---

## Section 7 - HANDLING AND STORAGE

---

### Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Take precautionary measures against static discharge. Use non-sparking tools. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. **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

Keep away from heat and ignition sources. Do not cut, puncture, or weld on or near this container. Empty containers may contain product residue.

### Incompatible Materials

Acids, bases, strong oxidizing agents

---

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

---

### Component Exposure Limits

<b>Magnesium oxide</b>	1309-48-4	
ACGIH:	10 mg/m3 TWA inhalable fraction	
NIOSH:	750 mg/m3 IDLH fume	
OSHA (US):	15 mg/m3 TWA fume, total particulate	
Mexico:	10 mg/m3 TWA LMPE-PPT as Mg fume	
<b>Zinc oxide</b>	1314-13-2	
ACGIH:	2 mg/m3 TWA respirable fraction	10 mg/m3 STEL respirable fraction
NIOSH:	5 mg/m3 TWA dust and fume	10 mg/m3 STEL fume
	15 mg/m3 Ceiling dust	500 mg/m3 IDLH

## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

OSHA (US):	5 mg/m <sup>3</sup> TWA fume; 15 mg/m <sup>3</sup> TWA total dust; 5 mg/m <sup>3</sup> TWA respirable fraction	
Mexico:	5 mg/m <sup>3</sup> TWA LMPE-PPT fume; 10 mg/m <sup>3</sup> TWA LMPE-PPT dust	
	10 mg/m <sup>3</sup> STEL [LMPE-CT] fume	
<b>Toluene</b>	108-88-3	
ACGIH:	20 ppm TWA	
NIOSH:	100 ppm TWA; 375 mg/m <sup>3</sup> TWA	150 ppm STEL; 560 mg/m <sup>3</sup> STEL
	500 ppm IDLH	
Europe:	50 ppm TWA; 192 mg/m <sup>3</sup> TWA	100 ppm STEL; 384 mg/m <sup>3</sup> STEL
	Possibility of significant uptake through the skin	
OSHA (G):	200 ppm TWA	300 ppm Ceiling
Mexico:	50 ppm TWA LMPE-PPT; 188 mg/m <sup>3</sup> TWA LMPE-PPT	
	Skin - potential for cutaneous absorption	
<b>Acetone</b>	67-64-1	
ACGIH:	250 ppm TWA	500 ppm STEL
NIOSH:	250 ppm TWA; 590 mg/m <sup>3</sup> TWA	2500 ppm IDLH (10% LEL)
Europe:	500 ppm TWA; 1210 mg/m <sup>3</sup> TWA	
OSHA (US):	1000 ppm TWA; 2400 mg/m <sup>3</sup> TWA	
Mexico:	1000 ppm TWA LMPE-PPT; 2400 mg/m <sup>3</sup> TWA LMPE-PPT	
	1260 ppm STEL [LMPE-CT]; 3000 mg/m <sup>3</sup> STEL [LMPE-CT]	

**Biological limit value**

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

**Engineering Controls**

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

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

**Eye/face protection**

Wear chemical safety goggles with a faceshield to protect against skin and eye contact when appropriate.

**Skin Protection**

Wear work clothes with long sleeves. Wear protective shoes.



## Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

### Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

### Glove Recommendations

Wear appropriate chemical resistant gloves.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	yellowish liquid	<b>Physical State</b>	liquid
<b>Odor</b>	hydrocarbon	<b>Color</b>	yellowish
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	-95 - -33 °C (-139--27 °F)	<b>Boiling Point</b>	56 - 139 °C (133-283 °F)
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	1.2
<b>Boiling Point Range</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition</b>	465 °C (869 °F)	<b>Flash Point</b>	-17 °C (0 °F)
<b>Lower Explosive Limit</b>	0.9 %	<b>Decomposition</b>	Not available
<b>Upper Explosive Limit</b>	12.8 %	<b>Vapor Pressure</b>	12.5 mmHg
<b>Vapor Density (air=1)</b>	5.8	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Negligible	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	5000 cps	<b>Solubility (Other)</b>	Hydrocarbons
<b>Density</b>	1.13 (relative)	<b>VOC</b>	<250 g/L

### Other Information

No additional information available.

## Section 10 - STABILITY AND REACTIVITY

### Reactivity

No reactivity hazard is expected.

### Chemical Stability





## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

Stable under normal conditions of use.

### **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

### **Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

### **Incompatible Materials**

Acids, bases, strong oxidizing agents

### **Hazardous decomposition products**

Oxides of carbon, oxides of nitrogen

---

## Section 11 - TOXICOLOGICAL INFORMATION

---

### **Information on Likely Routes of Exposure**

#### **Inhalation**

May cause drowsiness or dizziness.

#### **Skin Contact**

May cause allergic skin reaction. May cause skin irritation.

#### **Eye Contact**

Causes serious eye irritation.

#### **Ingestion**

May be fatal if swallowed and enters airways. May cause gastrointestinal irritation.

### **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:

Chlorinated polypropylene (Mixture)

Oral LD50 Rat 5000 mg/kg

Polyphenol antioxidant (Trade Secret)

Oral LD50 Rat >5000 mg/kg

Dermal LD50 Rabbit >5000 mg/kg

Inhalation LC50 Rat >165 mg/L 1 h

Magnesium oxide (1309-48-4)

Oral LD50 Rat >5000 mg/kg

Zinc oxide (1314-13-2)

Oral LD50 Rat >15000 mg/kg

Inhalation LC50 Rat >5.7 mg/L

Toluene (108-88-3)



## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

Oral LD50 Rat >7000 mg/kg  
Dermal LD50 Rabbit 12 - 14 g/kg  
Inhalation LC50 Rat 30 - 35 mg/L

Acetone (67-64-1)

Oral LD50 Rat 5800 mg/kg  
Dermal LD50 Guinea pig >7246 mg/kg  
Inhalation LC50 Rat 32000 ppm 4 h

Polychloroprene polymer (Mixture)

Oral LD50 Rat >5000 mg/kg

PCBTF (98-56-6)

Oral LD50 Rat 13 g/kg  
Dermal LD50 Rabbit >2 mL/kg  
Inhalation LC50 Rat 33 mg/L 4 h

### Immediate Effects

May be fatal if swallowed and enters airways. Causes serious eye irritation. May cause allergic skin reaction. Causes damage to central nervous system. May cause drowsiness or dizziness.

### Delayed Effects

Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure: central nervous system, blood.

### Irritation/Corrosivity Data

Causes serious eye irritation.

### Respiratory Sensitization

No data available.

### Dermal Sensitization

May cause allergic skin reaction.

### Component Carcinogenicity

<b>Magnesium oxide</b>	1309-48-4
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
<b>Toluene</b>	108-88-3
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
<b>Acetone</b>	67-64-1
ACGIH:	A4 - Not Classifiable as a Human Carcinogen



## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

**Germ Cell Mutagenicity**  
No data available.

**Reproductive Toxicity**  
No data available.

**Specific Target Organ Toxicity - Single Exposure**  
Central nervous system

**Specific Target Organ Toxicity - Repeated Exposure**  
Blood, central nervous system

**Aspiration hazard**  
May be fatal if swallowed and enters airways.

**Medical Conditions Aggravated by Exposure**  
May cause allergic skin reaction. Aspiration into the lungs may cause chemical pneumonitis.

**Additional Data**  
No additional information available.

### Section 12 - ECOLOGICAL INFORMATION

**Ecotoxicity**  
Avoid release to the environment.

**Component Analysis - Aquatic Toxicity**

<b>Polyphenol antioxidant</b>	Trade Secret
Fish:	LC50 96 h Oncorhynchus mykiss >0.2 mg/L [semi-static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata >0.2 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna >0.2 mg/L IUCLID
<b>Toluene</b>	108-88-3
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old); LC50 96 h Pimephales promelas 12.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oryzias latipes 54 mg/L [static]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static]



# Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [static] EPA; EC50 48 h Daphnia magna 11.5 mg/L IUCLID
Acetone	67-64-1
Fish:	LC50 96 h Oncorhynchus mykiss 4.74 - 6.33 mL/L; LC50 96 h Pimephales promelas 6210 - 8120 mg/L [static]; LC50 96 h Lepomis macrochirus 8300 mg/L
Invertebrate:	EC50 48 h Daphnia magna 10294 - 17704 mg/L [static] EPA; EC50 48 h Daphnia magna 12600 - 12700 mg/L IUCLID
PCBTF	98-56-6
Invertebrate:	EC50 48 h Daphnia magna 3.68 mg/L IUCLID

### Persistence and Degradability

No information available for the product.

### Bioaccumulative Potential

No information available for the product.

### Mobility

No information available for the product.

### Other Toxicity

No additional information available.

---

## Section 13 - DISPOSAL CONSIDERATIONS

---

### Disposal Methods

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

---

## Section 14 - TRANSPORT INFORMATION

---

### US DOT Information:

Shipping Name: Adhesives

Hazard Class: 3

UN/NA #: UN1133

Packing Group: II

Required Label(s): 3

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



# Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

**IATA Information:**

UN#: UN1133

**IMDG Information:**

UN#: UN1133

**TDG Information:**

UN#: UN1133

---

## 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.

Toluene	108-88-3
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ
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)**

**Acute Health: Yes Chronic Health: Yes 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
Magnesium oxide	1309-48-4	Yes	Yes	Yes	Yes	Yes
Zinc oxide	1314-13-2	Yes	Yes	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes



## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

Toluene	108-88-3
Repro/Dev. Tox	developmental toxicity , 1/1/1991

**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

Magnesium oxide	1309-48-4
	1 %
Zinc oxide	1314-13-2
	1 %
Toluene	108-88-3
	1 %
Acetone	67-64-1
	1 %

**Component Analysis - Inventory**

Chlorinated polypropylene (Mixture)

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

Polyphenol antioxidant (Trade Secret)

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

Magnesium oxide (1309-48-4)

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

Zinc oxide (1314-13-2)



## Safety Data Sheet

**Material Name: Low VOC Bonding Adhesive 1168**

**Product #: 318847**

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

**Toluene (108-88-3)**

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

**Acetone (67-64-1)**

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

**Yellow dye (2481-94-9)**

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

**PCBTF (98-56-6)**

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

---

### 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

**Summary of Changes**

New SDS: May 13, 2015



## Safety Data Sheet

Material Name: Low VOC Bonding Adhesive 1168

Product #: 318847

### 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; 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

#### 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. 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



**Section 1. Product and Company Information**

Product Name **NovaLink SL**  
 CHEM LINK INC.  
 353 E. Lyons Street  
 Schoolcraft, MI 49087, USA  
 Tel: 269-679-4440  
 Fax: 269-679-4448

**EMERGENCY CONTACTS**

Call Chemtrec: USA: 1-800-424-9300  
 International: (703) 527-3887  
 Product Use: Sealant  
 Chemical Family: Mixture  
 SDS Prepared: 19-Feb-15  
 SDS Prepared by: CHEM LINK Product Safety Group

**Section 2. Hazards Identification**

Hazardous classification: Irritant Category 2

Signal Words: **Warning**

**Hazardous Statements:**

H315 Causes skin Irritation.  
 H317: May cause an allergic skin reaction.  
 H319: Causes serious eye irritation.

**Precautionary Statements:**

P273: Avoid release to the environment.  
 P280: Wear protective gloves/protective clothing/eye protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes.  
 + P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
 P501: Dispose of contents/container in accordance with local regulation.

**R-phrases:**

R38 Irritating to skin.  
 R41 Risk of serious damage to eyes.  
 R43 May cause sensitization by skin contact.

**S-phrases**

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S39 Wear eye/face protection.

**Carcinogenicity:** This product contains no ingredient listed as a carcinogen on California Proposition 65 list.

Label: Pictogram

**HMIG**

<u>Health</u>	1
<u>Flammability</u>	0
	0

**Section 3. Composition / Information on Ingredients****HAZARDOUS INGREDIENTS**

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>Concentration</u>
Amino Silane	1760-24-3	1-3%

**Section 4. First Aid Measures**

First Aid For Skin: Clean product from affected area with Ethyl alcohol, then wash with soap and water.  
 First Aid For Eyes: Flush with large amounts of water for at least 15 minutes. Consult a Physician if ill effects or irritation occurs.  
 First Aid for Inhalation: An unlikely route of entry. Remove to fresh air. Consult a physician.  
 First Aid For Ingestion: An unlikely route of entry. Consult a physician.

**Section 5. Fire Fighting Measures**

NovaLink SL

Special Fire Fighting Instructions: None. Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters.

Extinguishing Media: Water, CO2, Dry Chemical, Foam.  
 Unusual Fire and Explosion Hazards: None.  
 Flashpoint: Not applicable.  
 Upper Flammable Limit: Not applicable.  
 Lower Flammable Limit: Not applicable.  
 Autoignition temperature: Not applicable.  
 Sensitivity to Impact: Not applicable.  
 Sensitivity to Static Discharge: Not applicable.  
 Hazardous Combustion Products: Thermal decomposition may produce toxic fumes of Carbon Monoxide, Carbon dioxide, Sulfur oxides and Hydrogen

**Section 6. Accidental release measures**

Handling Precautions: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact.  
 Cleanup: Collect spill with absorbent material such as cardboard, allow to cure and place into a container approved for waste disposal.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

**Section 7. Handling and Storage**

Handling Precautions: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact.  
 Prevention of fires and explosions: Product is not considered flammable under normal conditions, and product is not considered explosive.  
 Storage Requirements: Store in a cool dry area (this product polymerizes when in contact with moisture.)

**Section 8. Exposure Controls / Personal Protection**

Hand protection: Wear impervious gloves such as vinyl to minimize contact with skin.  
 Eye protection: Wear safety glasses or goggles to avoid eye contact.  
 Skin protection: Wear impervious gloves such as vinyl to minimize contact with skin.  
 Environmental exposure control: No specific controls are needed.

**Section 9. Physical and Chemical Properties**

Physical State:	Water Solubility: Insoluble	% Volatile: 1.40%
Appearance and Odor:	Paste, mild mint scent	VOC: 15.21 g/l
Freezing/Melting Point(°C):	NA	Flash Point: NA°C (Tag closed cup)
Odor Threshold (ppm):	NA	Autoignition Temperature: NA
Vapor Pressure:	<1	pH: NA
Vapor Density (Air=1):	>1	Flash Point Method: Based on FP of the most volatile component.
Density:	9.04 lbs./gal. (calculated)	LEL: NA UEL: NA
Specific Gravity:	1.08	

**Section 10. Stability and Reactivity**

Stability :	Considered Stable.	Hazardous	Thermal decomposition
Conditions to Avoid :	None known.	Decomposition	may produce toxic fumes
Incompatible Materials :	None known.	Products:	of CO and /or CO2.

**Section 11. Toxicological Information**

Information below is based on Amino Silane. (Refer to sections 2.and 3.)

Oral – Result:	LD50 > 2,000 mg/kg. Remark: Very low order of toxicity.
Skin Absorption – Result:	LD50 > 2,000 mg/kg. Remark: Very low order of toxicity.
Skin Direct contact – Result:	Slight irritation.
Eye Direct contact – Result:	Severe irritation. Remark: Causes corneal injury.
Inhalation – Result:	LC50 Not acutely Toxic.
Exposure Limits –	Not applicable.
Sensitization –	No.
Reproductive Toxicity –	No.
Mutagenicity –	No.
Teratogenicity –	No.
Synergistic Products –	None.

**Section 12. Ecological Information**

No known applicable information.

**Section 13. Disposal Considerations**

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. This product becomes a firm synthetic rubber when cured. Please allow to cure before disposal.

**Section 14. Transport Information**

Special Shipping Information	None.
DOT	Not regulated.
Hazard class or division:	None
Identification number:	None
Packing group:	None
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None
Water Transportation (IMO/IMDG)	
Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

**Section 15. Regulatory Information**

**Rotterdam Convention (PIC) Annex III:** listed (Tributyl tin compounds (impurities) <2ppm)

**US Regulatory Information**

OSHA 29 CFR 1910-1200 – Irritant.

TSCA – All components of this product are listed on TSCA Inventory.

CERCLA Reportable Quantity – Not applicable.

**SARA Title III:**

Section 302 Extremely Hazardous Substances – None.

Section 304 – Not applicable.

Section 311/312 – Immediate (acute) health hazard.

Section 313 – None.

RCRA – Refer to section 13.

California Proposition 65 Carcinogens: This product does not contain any chemicals known by the State of California to cause cancer.

California Proposition 65 Reproductive Toxins: This product does not contain any chemicals known by the State of California to cause reproductive harm.

**WHIMS Classification – D2B****Section 16. Other Information**

Prepared in accordance with 29 CFR 1910.1200

This Product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

To the best of our knowledge, the information contained herein is accurate. However CHEM LINK INC. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be handled with care. Although we have described herein all of the hazards to which we are currently aware, we cannot guarantee that these are the only hazards which exist.

**CHEM LINK**

**Construction & Maintenance**

Telephone: 800-826-1681  
Fax: 269-679-4448  
353 E. Lyons Street  
Schoolcraft, MI 49087  
[www.chemlink.com](http://www.chemlink.com)

Last Revision: 02/02/17  
Document No. DS1233

**Product Description**

NovaLink SL is a self-leveling, moisture curing sealant, designed for application on horizontal joints in concrete construction such as driveways, sidewalks, plaza decks, balconies, stairwells, parking structures, roof decks, and surrounding fountains and swimming pools. NovaLink SL cures rapidly to a solid rubber seal that can accommodate 25% joint movement. Its unique polyether cure chemistry allows NovaLink SL to be installed on damp concrete or in damp weather conditions without "outgassing" or forming CO<sub>2</sub> bubbles, as urethane sealants often do. Its excellent self leveling properties and smooth finish allow NovaLink SL to be installed without tooling. The elimination of masking tape and tooling results in a significant reduction in labor. NovaLink SL is solvent free and will not shrink. Its excellent adhesion to clean masonry or concrete allows it to be installed without a primer in most joints smaller than 1/2 inch wide.

**Applicable Performance Standards**

- ASTM C920, Type S, Grade P, Class 25, Uses T<sub>2</sub>, M, & O
- Federal Specification TT-S-00230-C Type I, Class B
- Corps of Engineers CRD-C-541, Type I, Class B
- Canadian Standards Board CAN 19, 13-M82

**Regulatory Compliance**

- Conforms to OTC Rule for Sealants
- Meets requirements of California Regs: CARB and SCAQMD
- This product does not contain cancer causing chemicals listed in California Proposition 65.
- Conforms to USDA Requirements for Non-food Contact

**Green Standards:**

- LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point
- NAHB Model Green Home Building Guidelines: 5 Global Impact Points
- VOC Content: less than 16 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)

**Advantages**

- Solvent free, 100% solids will not shrink
- 30 minute skin over
- No outgassing on damp surfaces
- Color stability, will not suntan
- Paintable within 24 hours (See limitations)
- +/- 25% joint movement

**Colors**

Stone, Gray, Black & White  
\* Color matching is available in batch quantity only

**Packaging**

- 10.1 oz (300 ml)  
24 cartridges/carton, 45 cartons/pallet
- 20 oz (600 ml)  
12 sausages/carton, 40 cartons/pallet
- 28 oz (825 ml)  
12 cartridges/carton, 40 cartons/pallet
- 2 Liter Pouch - 68 oz (2011 ml)  
4 pouches/carton, 45 cartons/pallet
- 2 and 5 gallon pails or 50 gallon drums available by special order



## Joint Preparation

Joint surfaces should be clean, dry, and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance.

## Joint Design

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). Control the depth of the sealant by using a polyethylene backer rod that is 25% larger than the joint opening at standard temperature. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, CHEM LINK recommends that an alternative bond breaker be used.

Joint Width Inches (mm)	Joint Depth Inches (mm)
1/4 - 1/2 (6-13)	1/4 (6)
1/2 - 3/4 (13-19)	1/4 - 3/8 (6-10)
3/4 - 1 (19-25)	3/8 - 1/2 (10-13)

CHEM LINK recommends an appropriate substrate primer to be used on high moving joints or dissimilar substrates which require increased adhesion properties.

Basic Uses
Expansion Joints
Masonry Pavers
Block and Masonry Repair
Patios
Walkways
Driveways
Decks - Concrete

Typical Uncured Properties		
Gun Grade	Self-Leveling	ASTM 679
Viscosity	30,000 cp +/- 15,000 cp	Brookfield RVF TC Spindle, 4 RPM, 73°F (23°C)
Density	8.6 +/- 0.2 lbs per gallon	ASTM D1475
Tack Free Time	30 +/- 15 min	45 +/- 5 % R.H.
Elongation at Break	350%	ASTM D412
Hardness Shore A	15	ASTM C661
Tensile Strength	120 psi	ASTM D412
Shear Strength	147 psi	ASTM D1002
Low temp. flex	Pass -10°F (-23°C) 1/4 inch mandrel	ASTM D816
Shrinkage	No visible shrinkage after 14 days	
Service Temperature	-40°F to 200°F (-40°C to 93°C)	

Compatible Substrates*
Concrete
Block and Brick
Stone
Masonry
Aged Asphalt
Wood
Aluminum and Galvanized Metal

\*Test and evaluate to ensure adequate adhesion.

## Application Guidelines:

### Concrete

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying **NovaLink SL**. Install an appropriate backer rod to avoid three-point bonding.

### Asphalt

Allow asphalt to cure for a minimum of six months prior to application. Clean and remove all oil residue prior to using **NovaLink SL**. Remove any residual contamination by mechanical abrasion, sand blasting or power washing.

### Metal

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.\*

*\*CHEM LINK recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.*

### Wood

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

### Priming

In most instances **NovaLink SL** will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. CHEM LINK recommends a primer be used for any application where prolonged immersion is anticipated or sealing dynamic joints.

### Storage

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. **NovaLink SL** will not freeze.

### Shelf Life

Twelve months from date of manufacture when stored at 70°F / 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life.

Pails have a shelf life of six months.

## Application Instructions

Remove all dirt, oil, loose paint, frost, and other contamination from all working surfaces with alcohol. DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain **NovaLink SL** at room temperature before applying to ensure easy gunning and leveling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

### Clean-Up

Wet sealant can be removed using a solvent such as alcohol. Cured **NovaLink SL** can be removed by abrading or scraping the substrate.

### Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the SDS for first aid information.

See [www.chemlink.com](http://www.chemlink.com) for most current SDS .  
KEEP OUT OF REACH OF CHILDREN.

### Limitations

- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations. 800-826-1681
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Allow asphalt to cure a minimum of six months before applying **NovaLink SL**
- Remove all coatings and sealers before application.
- Please contact customer service for application guidelines with temperatures below 32°F (0°C).
- Test and evaluate all paints before application. Polyurethane and oil based paints may dry slowly.



NOTES:



**Contractor Hot Line**

**800-826-1681**

[www.chemlink.com](http://www.chemlink.com)



All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique. Test and evaluate to determine appropriate usage. Visit [www.chemlink.com](http://www.chemlink.com) for the Safety Data Sheet, Technical Data Guides and full warranty for this product.

LIMITED WARRANTY: **CHEM LINK** warrants this product's performance, provided it is properly stored and applied within 1 year. If this **CHEM LINK** material is proved to be defective, return remaining product and purchase receipt for refund or replacement of product exclusive of labor or cost of labor. This is the sole and exclusive remedy for defects or failure of this product. User must read and follow the direction of the current Technical Data Guide and SDS prior to product use. User determines suitability of product for intended use and assumes all risks. Manufacturer shall not be liable for damages (including consequential or incidental damages) in excess of the purchase price, except where such exclusion or limitation is prohibited by state law. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; except for the above express warranty given by manufacturer, the product is sold with all faults. **CHEM LINK** SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. This warranty gives you specific legal rights, and you may also have other rights in the U.S. which vary from state to state. For warranty claim information, call 800-826-1681.





**GAF**  
**Safety Data Sheet**  
**SDS #2029**  
**SDS Date: December 2014**

---

**SECTION 1: PRODUCT AND COMPANY INFORMATION**

---

**PRODUCT NAME:** Everguard® TPO Seam Cleaner  
**TRADE NAME:** N/A  
**CHEMICAL NAME / SYNONYM:** N/A  
**CHEMICAL FAMILY:** N/A  
**MANUFACTURER:** GAF  
**ADDRESS:** 1 Campus Drive, Parsippany, NJ 07054  
**24 HOUR EMERGENCY PHONE: (CHEMTREC)** 800-424-9300  
**INFORMATION ONLY:** 800-766-3411  
**PREPARED BY:** Corporate EHS  
**APPROVED BY:** Corporate EHS

---

**SECTION 2: HAZARD IDENTIFICATION**

---

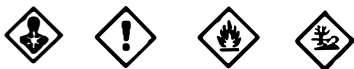
**NFPA and HMIS RATINGS:**

	NFPA Hazard Rating		HMIS Hazard Rating
<b>Health</b>	2	<b>Health</b>	2
<b>Flammable</b>	3	<b>Flammable</b>	3
<b>Reactive</b>	0	<b>Reactive</b>	0
<b>Special Hazards</b>	-	<b>Personal Protection</b>	X

**GHS LABEL ELEMENTS:**

**GHS CLASSIFICATION:** Flammable Liquid - Category 2  
Eye Irritant - Category 2A  
Skin Irritant - Category 2  
Acute Toxicity - Category 4  
Target Organ (SE) - Category 3  
Target Organ (RE) - Category 2  
Aspiration Toxicity - Category 1  
Hazardous to the Aquatic Environment - Category 2

## GHS PICTOGRAMS:



SIGNAL WORD: Danger

## HAZARD STATEMENTS:

Highly flammable liquid and vapor  
May cause damage to organs through prolonged or repeated exposure  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
Harmful if inhaled  
May be fatal if swallowed and enters airways  
Toxic to aquatic life with long lasting effects

## ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

PRIMARY ROUTE OF EXPOSURE: Inhalation, Skin Absorption, Skin Contact, Eye Contact, Ingestion

## SIGNS &amp; SYMPTOMS OF EXPOSURE

- Eyes:** Can cause eye irritation. Symptoms include stinging, tearing, redness, swelling of the eyes and/or blurred vision.
- Skin:** Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage such as blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.
- Ingestion:** Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or while vomiting. This results in lung inflammation and other lung injury.
- Inhalation:** Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits.

## ACUTE HEALTH HAZARDS:

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include; metallic taste, redness of the skin, stomach or intestinal upset (nausea, vomiting, diarrhea, irritation (nose, throat, airways), discomfort in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling), followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and other central nervous system effects, temporary changes in mood and behavior, effects on memory, weakness, respiratory depression (slowing of

the breathing rate), shortness of breath, lack of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma, and death.

**CHRONIC HEALTH HAZARDS:**

Overexposure to this material, (or its components), has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, cardiac sensitization, and kidney damage. This material, (or a component), has been shown to cause birth defects in laboratory animal studies. The relevance of these findings to humans is uncertain. This material is not expected to cause cancer in humans since it did not cause cancer in laboratory animals.

**CARCINOGENICITY:**

Ethyl Benzene has been shown to cause cancer in laboratory animals. The relevance of this finding in humans is uncertain. The International Agency for Research on Cancer (IARC) has classified ethyl benzene as a possible human carcinogen. Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL NAME	CAS #	% (BY WT)	OCCUPATIONAL EXPOSURE LIMITS		
			OSHA	ACGIH	OTHER
Xylene	1330-20-7	>=77%	100 ppm	100 ppm	REL 100 ppm
Ethyl Benzene	100-41-4	>=22%	100 ppm	100 ppm	REL 100 ppm

**SECTION 4: FIRST AID MEASURES**

**FIRST AID PROCEDURES**

- 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. Flush exposed areas with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.
- INHALATION:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**INGESTION:** Seek medical attention immediately. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting.

---

**SECTION 5: FIRE FIGHTING PROCEDURES**

---

**SUITABLE EXTINGUISHING MEDIA:** Dry chemical, Foam, Carbon Dioxide (CO<sub>2</sub>)

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide and carbon monoxide, hydrocarbons

**RECOMMENDED FIRE FIGHTING PROCEDURES:** Wear full fire fighting turn-out gear, (full bunker gear), and respiratory protection, (SCBA).

**UNUSUAL FIRE & EXPLOSION HAZARDS:** Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling pint. Never use welding or cutting torch on or near drum, (even empty), because product, (even just residue), can ignite explosively.

---

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

---

**ACCIDENTAL RELEASE MEASURES:** Wear appropriate protective equipment as described in section 8. Eliminate all sources of ignition. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at the source. Prevent spill from spreading and entering drains, sewers, streams, or other bodies of water. 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.

---

**SECTION 7: HANDLING AND STORAGE**

---

**HANDLING AND STORAGE:** Containers of this material may be hazardous when emptied. Since emptied containers retain product residues, (vapors, liquid,

and/or solid), all hard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

**OTHER PRECAUTIONS:**

Absorb liquid of vermiculite, floor absorbent or other absorbent material.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****ENGINEERING CONTROLS / VENTILATION:**

Provide sufficient mechanical ventilation to maintain exposure below exposure limits.

**RESPIRATORY PROTECTION:**

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

**EYE PROTECTION:**

Chemical splash goggles.

**SKIN PROTECTION:**

Wear resistant gloves.

**OTHER PROTECTIVE EQUIPMENT:**

To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**WORK HYGIENIC PRACTICES:**

N/A

**EXPOSURE GUIDELINES:**

N/A

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE &amp; ODOR:</b>	Colorless liquid. Mild Aromatic odor.		
<b>FLASH POINT:</b>	79.9°F / 26.66°C	<b>LOWER EXPLOSIVE LIMIT:</b>	1.0%
<b>METHOD USED:</b>	N/A	<b>UPPER EXPLOSIVE LIMIT:</b>	6.6%
<b>EVAPORATION RATE:</b>	.86 (N-Butyl Acetate)	<b>BOILING POINT:</b>	137.00°F / 278.60°C
<b>pH (undiluted product):</b>	7	<b>MELTING POINT:</b>	-52.60°F / -47.00°C
<b>SOLUBILITY IN WATER:</b>	Negligible in water	<b>SPECIFIC GRAVITY:</b>	N/A

VAPOR DENSITY:	3.66 (AIR=1)	PERCENT VOLATILE:	N/A
VAPOR PRESSURE:	1.06 kPa @ 77°F / 25°C	MOLECULAR WEIGHT:	N/A
VOC WITH WATER (LBS/GAL):	7.25 lb/gal @ 77°F / 25°C	WITHOUT WATER (LBS/GAL):	N/A

**SECTION 10: STABILITY AND REACTIVITY**

THERMAL STABILITY: STABLE X UNSTABLE

CONDITIONS TO AVOID (STABILITY): N/A

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Dioxide and carbon monoxide, hydrocarbons

HAZARDOUS POLYMERIZATION: None

**SECTION 11: TOXICOLOGICAL INFORMATION**

TOXICOLOGICAL INFORMATION: Acute oral toxicity

Xylene LD 50 Rat: 4,300 mg/kg

Ethyl Benzene LD 50 Rat: 3,500 mg/kg

**Acute inhalation toxicity**

Ethyl Benzene LC Lo Rat: 4000 ppm, 4 h

**Acute dermal toxicity**

Xylene LD 50 Rabbit: > 2,000 mg/kg

Ethyl Benzene LD 50 Rabbit: 15,433 mg/kg

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOLOGICAL INFORMATION:** Aquatic toxicity

Acute and Prolonged Toxicity to Fish

96 h LC 50 Rainbow trout, Donaldson trout (*Oncorhynchus mykiss*): 6.7 – 10 mg/l Mortality

96 h LC 50 Fathead minnow (*Pimephales promelas*): 23.53 – 29.97 mg/l Mortality

Acute Toxicity to Aquatic Invertebrates

24 h LC 50 Water flea (*Daphnia magna*): > 100-<1,000 mg/l Mortality

---

### SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** This product, as supplied, is regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. If discarded in its purchased form, this product is a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or residue of the product remains classified a hazardous waste as per 40 CFR 261, Subpart C. State or local regulations may also apply if they differ from the federal regulation.

**RCRA HAZARD CLASS:** D001, Ignitable Hazardous Waste

---

### SECTION 14: TRANSPORTATION INFORMATION

#### U.S. DOT TRANSPORTATION

**PROPER SHIPPING NAME:** Xylenes

**HAZARD CLASS:** 3

**ID NUMBER:** UN 1307

**PACKING GROUP:** III

**LABEL STATEMENT:** N/A

**OTHER:** Dangerous goods descriptions, (if indicated above), may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15 REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS**

**TSCA:** This product and its components are listed on the TSCA 8(b) inventory.

**CERCLA:** N/A

**SARA**

**311/312 HAZARD CATEGORIES:** Fire hazard, acute health hazard, chronic health hazard

**313 REPORTABLE INGREDIENTS:** Xylene 1330-20-7 77%  
Ethyl Benzene 100-41-4 22%

**CALIFORNIA PROPOSITION 65:** This product contains a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

Other state regulations may apply. Check individual state requirements. The following components appear on one or more of the following state hazardous substances list:

Chemical Name	CAS #	CA	MA	MN	PA	NJ	RI
Xylene	1330-20-7	Yes	Yes	Yes	Yes	Yes	Yes
Ethyl Benzene	100-41-4	Yes	Yes	Yes	Yes	Yes	Yes

**SECTION 16 OTHER INFORMATION**

**ADDITIONAL COMMENTS:** N/A

**DATE OF PREVIOUS SDS:** September 2013

**CHANGES SINCE PREVIOUS SDS:** Headquarters Address Change

This information relates to the specific material designated and may not be valid for such material used on combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.



# EVERROOF® PRIMER M80

## Technical Data Sheet

Two Component  
Epoxy-Polyamine  
Cool Roof Primer

EVERROOF® PRIMER M80 is a two component, liquid applied, solvent based polyurethane primer with unique penetrating characteristics.

### FEATURES & BENEFITS

- Substrate penetrating
- Low viscosity
- Quick cure / re-coat time

### TYPICAL USES

- Wood
- Metal
- Polyurethane elastomeric surfaces

### DIRECTION FOR USE

**MIXING:** EVERROOF® PRIMER M80 should not be diluted under any circumstance. The volume mixing ratio: 1 unit Part-A black liquid to 1 Part-B white liquid. EVERROOF® PRIMER M80 Part-B should be thoroughly mixed prior to combining to ensure a homogeneous material. The combined components should be thoroughly blended using a mechanical mixer at slow speed or for at least 5 minutes if mixed by hand.

**APPLICATION:** Remove all contaminants, oil and grease from substrate. EVERROOF® PRIMER M80 should be applied at the rate of 1 gallon (3.78L) (mixture of part-A & part-B)/300 sq. ft. (27.87 m<sup>2</sup>). It can be applied using an airless sprayer, brush, or phenolic resin core roller. Allow EVERROOF® PRIMER M80 to become nearly tack free before applying the coating. Recommended surface temperature should be greater than 50°C (10°C). If EVERROOF® PRIMER M80 is allowed to dry completely, re-prime the surface before proceeding. EVERROOF® PRIMER M80 is sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the cure time and decrease pot life. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extend the cure time.

**LIMITATIONS:** This information is meant to be used as a general guideline only. Consult the project specification and your EVERROOF® Representative for specific installation procedures.

EVERROOF® PRIMER M80 is not UV stable and cannot withstand direct wear or abrasion. Containers that have been open must be mixed and used within 20 minutes. EVERROOF® PRIMER M80 is difficult to clean up after it has cured.

### STORAGE & HANDLING

Keep containers closed and store in a dry, cool place away from direct sunlight, heat, sparks, open flame, and moisture. Keep material stored above 65°F (18°C). Open containers should be blanketed with dry nitrogen before resealing. Shelf life: 6 months.

### SAFETY

Review the Material Safety Data Sheet (MSDS) and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

### TECHNICAL DATA

Packaging	2 gal kit (7.56L kit) includes the following: Part-A: 1 gal (3.78L.) Part-B: 1 gal (3.78L)
Coverage Rate	1 gal / 300 sq ft (3.79L / 27.87 m <sup>2</sup> )
Color	Part-A Black Part-B White
Shelf Life	1 year (unopened container)
Dry Film Thickness (1 gal / 300 sq ft)	4 ± 1 mils (102 ± 25µ)
Mixing Ratio by Volume	1A : 1B
Pot Life @ 75°F, 50% R.H.	60 - 90 minutes
Specific Gravity / Part-A, Part-B	1.30, 1.89
Total Solids by Weight, ASTM D-2369	90 ± 2%
Total Solids by Volume, ASTM D-2697	84 ± 2%
Viscosity at 75°F (24°C), Part-A & Part-B Combined	1,200 ± 200 cps
Volatile Organic Compound, ASTM D-2369-81	100 g / L (0.83 lbs / gal)

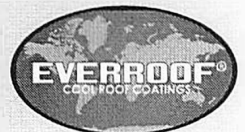
EVERROOF® Products  
Tel: 702-966-9961 | Fax: 702-543-2238  
www.everroofproducts.com



Please read all information in the general guidelines, technical data sheets, application guide, and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local EVERROOF® representative or visit our website for current technical data and instructions.

**DISCLAIMER:** All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and tests, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether verbal or in writing, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and EVERROOF® makes no claim that these tests or any other tests, accurately represent all environments.

© June 2014



# EVER-SILIC<sup>®</sup> HS

## Technical Data Sheet

Single Component  
High Solids Silicone  
Cool Roof Top / Base Coat

EVER-SILIC<sup>®</sup> HS is a single-component silicone elastomer specifically designed with high volume solids. It is a pure elastomeric silicone coating system that provides superior weatherproofing, and UV resistance over a variety of roof substrates. The outstanding features of EVER-SILIC<sup>®</sup> HS are its high solids content, rapid cure and superior physical properties. Tested and certified to meet Cool Roof Rating Council (CRRC) and EPA guidelines for ENERGY STAR<sup>®</sup> compliance.

## FEATURES & BENEFITS

- Prolongs the life of a roof while helping lower internal temperatures and reducing cooling costs
- Hydroponic - withstands water penetration
- High tensile strength and abrasion resistance
- Excellent adhesion to a variety of roof surfaces
- Ease of application - extremely fast and simple to install
- Can be used to reinforce and seal seams, penetrations and terminations, and make spot repairs
- Slows degradation caused by normal weathering, aging, and ultraviolet rays
- Economical - extends the life of your roof
- Retains its integrity from -80°F to 250°F
- Accelerator package is available to shorten cure time
- Can be re-coated up to 7 to 10 days between coats
- No checking or cracking after 8,000 hours\*

## TYPICAL USES

EVER-SILIC<sup>®</sup> HS can be applied to aged or cured single-ply, metal, spray polyurethane foam, built-up roofing or modified bitumen, and concrete roof systems. Can be applied as part of a maintenance or repair program or as part of a complete restoration system with EVERROOF<sup>®</sup>'s SIL-THANE<sup>®</sup> Cool Roof System or EVER-SILIC<sup>®</sup> Cool Roof System.

All EVERROOF<sup>®</sup> products are to be used and applied with reference to and in conjunction with EVERROOF<sup>®</sup>'s Guidelines and Specifications.

## DIRECTION FOR USE

**MIXING:** Review all technical data sheets, system sheets, labels, instructions, MSDS, and Guide Specifications before mixing and applying. Mix 55 gallon (208.2 liter) drums and 5 gallon (18.93 liter) pails with a variable speed drill utilizing a jiffy mixer to suspend any settled pigments until a uniform color and consistency is achieved. Mixing time will vary based on temperature and atmospheric conditions.

**APPLICATION:** Prior to coating any surface, be sure the coating will adhere by performing an adhesion test (ASTM D-903). Coating may be applied by brush, roller, or airless spray equipment. Do not apply when temperatures are below 40°F (4.4°C) or when precipitation is in forecast within 48 hours. In areas where the roof is subject to foot traffic, it is recommended to apply walkway pads for added protection and slip resistance.

**Spray Applied:** See EVERROOF<sup>®</sup>'s Spray Application Guide. Spray application is not recommended below 50°F (10°C).

\*Accelerated Weathering exposure in an Atlas carbon arc weatherometer according to ASTM D-822.

## TECHNICAL DATA

Packaging	<b>5</b> 5 gal (18.93L) pail
	<b>55</b> 55 gal (208.2L) drum
Coverage Rate	1 gal / 100 sq ft (3.78L / 9.29 m <sup>2</sup> )
Color	White, Custom Colors Available
Shelf Life	6 months (unopened container)
Dry Time, (75°F, 50% RH)	> 3
Dry Time w/ Accelerator Pkg.	< 2
Weathering QUV 10,000 hours	No degradation
Elongation, ASTM D-412	200% (±15)
Tensile Strength (Die C)	300 psi (±25)
Permanent Set at Bread	1.0%
Permanent Change - Heat Aged	0%
Tension Set @ 100%, ASTM D-412	0%
Water Absorption, ASTM D-570	0.2
Durometer Hardness: Shore A	45 - 55
Permeability (U.S. perms)	2.0
Tear Strength	45 lbs/in
Solids by Volume	98%
Solids by Weight	98%
Viscosity	8,000 - 11,000 cps
Specific Gravity	1.20
Flash Point	280°F

EVERROOF<sup>®</sup> Products  
Tel: 702-966-9961 | Fax: 702-543-2238  
www.everroofproducts.com



## STORAGE & HANDLING

Keep containers closed and store in a dry, cool place away from heat, sparks, open flame, excessive heat, and moisture. Keep material stored above 65°F (18°C). Open containers should be blanketed with dry nitrogen before resealing.

Vapors 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 or other ignition sources at locations distant from the material-handling point. Never use a welding or cutting torch on or near the drum. In case of fire, use CO<sup>2</sup>, steam, dry chemicals or water fog.

## SAFETY

Review the Material Safety Data Sheets (MSDS) and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

### VAPOR INHALATION

The best form of protection against organic solvents or potentially sensitizing vapors in the workplace is a fresh air supply. Numerous manufacturers, including the 3M Company and MSA, make full face fresh air masks. For maximum protection, we recommend use of NIOSH/MSHA approved self-contained breathing apparatus with a full-face piece operated in a positive pressure mode. In well-ventilated application conditions, the use of Type C organic vapor cartridge respirators is acceptable.

### SKIN CONTACT

To prevent excessive skin contact with the sprayed product, we recommend use of fabric coveralls and neoprene or other resistant gloves.

### EYE CONTACT

Wear a full-face mask or OSHA-approved protective goggles.

## FIRST AID CONSIDERATION

Vapor inhalation problems are characterized by coughing, shortening of breath and tightness in the chest. Anyone exhibiting these types of symptoms should be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme, **SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.**

Effects of overexposure to vapor are characterized by nasal and respiratory irritation, dizziness, nausea, headache, fatigue, possible unconsciousness or even asphyxiation.

If ingested and the victim is conscious, give large amounts of water or milk to drink. Obtain medical attention immediately. Skin contact with liquid components can result in a rash or other irritation. Wash the affected skin area with water. Wipe residual liquid from the skin with a clean cloth, then wipe the affected area with 30% solution of rubbing alcohol. Follow the alcohol wipe with repeated washings with soap and water. If a rash or other irritation develops, see a physician.

Eye contact with liquid or sprayed components can result in corneal burns or abrasions. Upon exposure, eyes should be flushed with water for an extensive period. **SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.**

Please read all information in the general guidelines, technical data sheets, application guide, and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local EVERROOF® representative or visit our website for current technical data and instructions.

**DISCLAIMER:** All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and tests, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether verbal or in writing, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and EVERROOF® makes no claim that these tests or any other tests, accurately represent all environments.

© June 2014



# SAFETY DATA SHEET

Date Issued : 10/2/2013  
 MSDS No : 11-500  
 Date Revised : 11/5/2014  
 Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MIRACLE Glenkote 11-500 Sealflex

**MANUFACTURER**

ITW Polymers Sealants North America  
 56 Air Station Industrial Park  
 Rockland, MA 02370

**Product Stewardship:** (781) 878-7015

**24 HR. EMERGENCY TELEPHONE NUMBERS**

CHEMTREC (US Transportation): (800) 424-9300

**COMMENTS:** MIRACLE is a registered trademark of Illinois Tool Works, Inc.

### 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATIONS**

**Health:**

Target Organ Toxicity (Repeated exposure), Category 2

**GHS LABEL**



Health  
hazard

**SIGNAL WORD:** WARNING

**HAZARD STATEMENTS**

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

**PRECAUTIONARY STATEMENT(S)**

**Prevention:**

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

**Response:**

P314: Get medical advice/attention if you feel unwell.

**Disposal:**

P501: Dispose of contents/container according to local, regional, national, and international regulations.

**EMERGENCY OVERVIEW**

**IMMEDIATE CONCERNS:** WARNING! Contains crystalline silica (quartz). Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Mildly irritating to the eyes.

**SKIN:** Not likely to be absorbed in toxic amounts. Prolonged exposure may cause skin irritation. Avoid skin contact as much as possible.

**SKIN ABSORPTION:** None Expected.

# SAFETY DATA SHEET

**Date Issued :** 10/2/2013  
**MSDS No :** 11-500  
**Date Revised :** 11/5/2014  
**Revision No :** 6

## MIRACLE Glenkote 11-500 Sealflex

**INGESTION:** This material may be harmful or fatal if swallowed in large quantities. Small amounts are not expected to produce adverse health effects.

**INHALATION:** Materials are low in volatility and are not likely to pose a problem under normal operating conditions. Slight irritation to nose and throat with prolonged or repeated exposure.

**CARCINOGENICITY:** IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I)".

IARC has also concluded that vinyl acetate is "possibly carcinogenic to humans (Group 2B)".

**ROUTES OF ENTRY:** Eye and skin contact. Inhalation and ingestion are unlikely routes of entry.

**IRRITANCY:** Slight eye and skin irritation.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Silica, Crystalline	< 0.5	14808-60-7
Vinyl Acetate	< 0.5	108-05-4

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** Small amounts are not expected to produce adverse health effects. Larger amounts should be recovered by aspiration. Get medical attention.

**INHALATION:** No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Slight irritation.

**SKIN:** Slight skin irritation.

**SKIN ABSORPTION:** None Expected.

**INGESTION:** None known, not likely route of entry.

**INHALATION:** Materials are low in volatility therefore not likely to pose a problem.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** Class IIIB

**GENERAL HAZARD:** Combustible Liquid.

**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, dry chemical or foam.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon Monoxide, Carbon Dioxide

**EXPLOSION HAZARDS:** Decomposition products may cause a health hazard.

**FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear. After water evaporates, remaining material will

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
 MSDS No : 11-500  
 Date Revised : 11/5/2014  
 Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

burn.

**SENSITIVE TO STATIC DISCHARGE:** Not Applicable

**SENSITIVITY TO IMPACT:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Fumes, smoke, carbon monoxide and carbon dioxide may form when heated to decomposition.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the appropriate personal protective equipment (PPE) should participate in spill response and clean-up.

**LARGE SPILL:** Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation).

**HANDLING:** Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

**STORAGE:** Keep container closed when not in use. Store in a dry, well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container.

**STORAGE TEMPERATURE:** 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

**SHELF LIFE:** 1 year from manufacture date

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# SAFETY DATA SHEET

**Date Issued :** 10/2/2013  
**MSDS No :** 11-500  
**Date Revised :** 11/5/2014  
**Revision No :** 6

## MIRACLE Glenkote 11-500 Sealflex

**SOLUBILITY IN WATER:** Soluble  
**EVAPORATION RATE:** < 1.0 (n-Butyl Acetate=1)  
**DENSITY:** 9.98 lbs/gal  
**PARTICLE SIZE:** Not Determined  
**SPECIFIC GRAVITY:** 1.197  
**VISCOSITY:** Not Determined  
**MOLECULAR WEIGHT:** Not Determined  
**(VOC):** 65.500 gr/L EPA Method 24 VOC  
**Notes:** Photochemically Reactive Only VOC: 32.9 gr/L  
**COEFF. OIL/WATER:** Not Determined  
**OXIDIZING PROPERTIES:** Not Determined  
**COMMENTS:** 0 lb VHAP/lb Solid  
 0% by weight HAP

### 10. STABILITY AND REACTIVITY

**STABLE:** Yes  
**HAZARDOUS POLYMERIZATION:** No  
**STABILITY:** Stable.  
**POLYMERIZATION:** Product will not undergo polymerization.  
**CONDITIONS TO AVOID:** None known.  
**POSSIBILITY OF HAZARDOUS REACTIONS:** None Expected.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide may form when heated to decomposition.  
**INCOMPATIBLE MATERIALS:** Strong acids or alkaline materials.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
Silica, Crystalline	No data	No data	No data
Vinyl Acetate	2920 mg/kg	2335 mg/kg	2500 ppm (4-hr dose)

#### CARCINOGENICITY

Chemical Name	NTP Status	IARC Status
Silica, Crystalline	1	1
Vinyl Acetate		2B

**IARC:** IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational



# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Silica, Crystalline	<b>TWA</b>	NL	0.1 mg/m <sup>3</sup>	NL	0.05 mg/m <sup>3</sup>
	<b>STEL</b>	NL [1]	NL [1]	NL [1]	NL [1]
Vinyl Acetate	<b>TWA</b>	NL [1]	NL [1]	10 ppm	35 mg/m <sup>3</sup>
	<b>STEL</b>	NL [1]	NL [1]	15 ppm	53 mg/m <sup>3</sup>
<b>Footnotes:</b>					
1. NL = Not Listed					

**ENGINEERING CONTROLS:** Natural ventilation should be adequate under normal conditions.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields. A face shield may be necessary if spraying the product.

**SKIN:** Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

**RESPIRATORY:** No respiratory protection required under normal conditions.

**WORK HYGIENIC PRACTICES:** Use good hygiene practices when handling this material. Wash hands thoroughly after use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR THRESHOLD:** Not Determined

**COLOR:** White to Cream

**pH:** Not Determined

**PERCENT VOLATILE:** 44.3

**Notes:** by weight

**FLASHPOINT AND METHOD:** Not Applicable

**FLAMMABLE LIMITS:** Not Applicable

**AUTOIGNITION TEMPERATURE:** Not Applicable

**VAPOR PRESSURE:** Not Determined

**VAPOR DENSITY:** Not Determined

**BOILING POINT:** >= 100°C (212°F)

**FREEZING POINT:** Not Determined

**MELTING POINT:** Not Determined

**POUR POINT:** Not Determined

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

sources is carcinogenic to humans (Group I)".

IARC has also concluded that vinyl acetate is "possibly carcinogenic to humans (Group 2B)".

**NTP:** Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

**IRRITATION:** Slight eyes and skin irritation.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

**ECOTOXICOLOGICAL INFORMATION:** Contains components that are potentially toxic to freshwater and saltwater ecosystems.

**BIOACCUMULATION/ACCUMULATION:** Contains components with the potential to bio-accumulate.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in accordance with all local, state and federal regulations.

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated for Transport

### 15. REGULATORY INFORMATION

#### UNITED STATES

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No **CHRONIC:** No

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt.%	CAS
Vinyl Acetate	< 0.5	108-05-4

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

Chemical Name	Wt.%	CERCLA RQ
Vinyl Acetate	< 0.5	5,000

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS	TSCA SECTION
Silica, Crystalline	14808-60-7	
Vinyl Acetate	108-05-4	12b,

**CLEAN AIR ACT**

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11- 500 Sealflex

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MIRACLE Glenkote 11-500 Sealflex

**MANUFACTURER**

ITW Polymers Sealants North America  
56 Air Station Industrial Park  
Rockland, MA 02370

**Product Stewardship:** (781) 878-7015

**COMMENTS:** MIRACLE is a registered trademark of Illinois Tool Works, Inc.

**24 HR. EMERGENCY TELEPHONE NUMBERS**

CHEMTREC (US Transportation): (800) 424-9300

### 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATIONS**

**Health:**

Target Organ Toxicity (Repeated exposure), Category 2

**GHS LABEL**



Health  
hazard

**SIGNAL WORD:** WARNING

**HAZARD STATEMENTS**

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

**PRECAUTIONARY STATEMENT(S)**

**Prevention:**

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

**Response:**

P314: Get medical advice/attention if you feel unwell.

**Disposal:**

P501: Dispose of contents/container according to local, regional, national, and international regulations.

**EMERGENCY OVERVIEW**

**IMMEDIATE CONCERNS:** WARNING! Contains crystalline silica (quartz). Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death. Crystalline silica (quartz) inhaled from occupational sources is classified as carcinogenic to humans.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Mildly irritating to the eyes.

**SKIN:** Not likely to be absorbed in toxic amounts. Prolonged exposure may cause skin irritation. Avoid skin contact as much as possible.

**SKIN ABSORPTION:** None Expected.

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

**INGESTION:** This material may be harmful or fatal if swallowed in large quantities. Small amounts are not expected to produce adverse health effects.

**INHALATION:** Materials are low in volatility and are not likely to pose a problem under normal operating conditions. Slight irritation to nose and throat with prolonged or repeated exposure.

**CARCINOGENICITY:** IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I)".

IARC has also concluded that vinyl acetate is "possibly carcinogenic to humans (Group 2B)".

**ROUTES OF ENTRY:** Eye and skin contact. Inhalation and ingestion are unlikely routes of entry.

**IRRITANCY:** Slight eye and skin irritation.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Silica, Crystalline	< 0.5	14808-60-7
Vinyl Acetate	< 0.5	108-05-4

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** Small amounts are not expected to produce adverse health effects. Larger amounts should be recovered by aspiration. Get medical attention.

**INHALATION:** No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Slight irritation.

**SKIN:** Slight skin irritation.

**SKIN ABSORPTION:** None Expected.

**INGESTION:** None known, not likely route of entry.

**INHALATION:** Materials are low in volatility therefore not likely to pose a problem.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** Class IIIB

**GENERAL HAZARD:** Combustible Liquid.

**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, dry chemical or foam.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon Monoxide, Carbon Dioxide

**EXPLOSION HAZARDS:** Decomposition products may cause a health hazard.

**FIRE FIGHTING PROCEDURES:** As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear. After water evaporates, remaining material will

**SAFETY DATA SHEET**

Date Issued : 10/2/2013  
 MSDS No : 11-500  
 Date Revised : 11/5/2014  
 Revision No : 6

**MIRACLE Glenkote 11-500 Sealflex**

burn.

**SENSITIVE TO STATIC DISCHARGE:** Not Applicable

**SENSITIVITY TO IMPACT:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Fumes, smoke, carbon monoxide and carbon dioxide may form when heated to decomposition.

**6. ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL:** Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the appropriate personal protective equipment (PPE) should participate in spill response and clean-up.

**LARGE SPILL:** Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Know and prepare for spill response before using or handling this product. Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled containers for disposal. Use appropriate PPE. Place absorbent diking materials in covered containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

**7. HANDLING AND STORAGE**

**GENERAL PROCEDURES:** For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation).

**HANDLING:** Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

**STORAGE:** Keep container closed when not in use. Store in a dry, well ventilated area, out of the sun and away from ignition sources. Do not remove or deface label. Prevent water or moist air from entering container

**STORAGE TEMPERATURE:** 15.5°C (60°F) Minimum to 35°C (95°F) Maximum

**SHELF LIFE:** 1 year from manufacture date

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Gl erkote 11-500 Seal fl

### EXPOSURE GUIDELINES

#### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

Chemical Name		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Silica, Crystalline	TWA	NL	0.1 mg/m <sup>3</sup>	NL	0.05 mg/m <sup>3</sup>
	STEL	NL [1]	NL [1]	NL [1]	NL [1]
Vinyl Acetate	TWA	NL [1]	NL [1]	10 ppm	35 mg/m <sup>3</sup>
	STEL	NL [1]	NL [1]	15 ppm	53 mg/m <sup>3</sup>

#### Footnotes:

1. NL = Not Listed

**ENGINEERING CONTROLS:** Natural ventilation should be adequate under normal conditions.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety glasses with side shields. A face shield may be necessary if spraying the product.

**SKIN:** Wear impervious gloves, if needed, to prevent repeated or prolonged skin contact.

**RESPIRATORY:** No respiratory protection required under normal conditions.

**WORK HYGIENIC PRACTICES:** Use good hygiene practices when handling this material. Wash hands thoroughly after use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR THRESHOLD:** Not Determined

**COLOR:** White to Cream

**pH:** Not Determined

**PERCENT VOLATILE:** 44.3

Notes: by weight

**FLASHPOINT AND METHOD:** Not Applicable

**FLAMMABLE LIMITS:** Not Applicable

**AUTOIGNITION TEMPERATURE:** Not Applicable

**VAPOR PRESSURE:** Not Determined

**VAPOR DENSITY:** Not Determined

**BOILING POINT:** >= 100°C (212°F)

**FREEZING POINT:** Not Determined

**MELTING POINT:** Not Determined

**POUR POINT:** Not Determined

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

**SOLUBILITY IN WATER:** Soluble  
**EVAPORATION RATE:** < 1.0 (n-Butyl Acetate=1)  
**DENSITY:** 9.98 lbs/gal  
**PARTICLE SIZE:** Not Determined  
**SPECIFIC GRAVITY:** 1.197  
**VISCOSITY:** Not Determined  
**MOLECULAR WEIGHT:** Not Determined  
**(VOC):** 65.500 gr/L EPA Method 24 VOC  
**Notes:** Photochemically Reactive Only VOC: 32.9 gr/L  
**COEFF. OIL/WATER:** Not Determined  
**OXIDIZING PROPERTIES:** Not Determined  
**COMMENTS:** 0 lb VHAP/lb Solid  
 0% by weight HAP

### 10. STABILITY AND REACTIVITY

**STABLE:** Yes  
**HAZARDOUS POLYMERIZATION:** No  
**STABILITY:** Stable.  
**POLYMERIZATION:** Product will not undergo polymerization.  
**CONDITIONS TO AVOID:** None known.  
**POSSIBILITY OF HAZARDOUS REACTIONS:** None Expected.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide may form when heated to decomposition.  
**INCOMPATIBLE MATERIALS:** Strong acids or alkaline materials.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
Silica, Crystalline	No data	No data	No data
Vinyl Acetate	2920 mg/kg	2335 mg/kg	2500 ppm (4-hr dose)

#### CARCINOGENICITY

Chemical Name	NTP Status	IARC Status
Silica, Crystalline	1	1
Vinyl Acetate		2B

**IARC:** IARC has concluded that "crystalline silica inhaled in the form of quartz or cristobalite from occupational

# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

sources is carcinogenic to humans (Group I)".

IARC has also concluded that vinyl acetate is "possibly carcinogenic to humans (Group 2B)".

**NTP:** Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

**IRRITATION:** Slight eyes and skin irritation.

### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

**ECOTOXICOLOGICAL INFORMATION:** Contains components that are potentially toxic to freshwater and saltwater ecosystems.

**BIOACCUMULATION/ACCUMULATION:** Contains components with the potential to bio-accumulate.

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in accordance with all local, state and federal regulations.

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated for Transport

### 15. REGULATORY INFORMATION

#### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** No **CHRONIC:** No

#### EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Vinyl Acetate	< 0.5	108-05-4

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt. %	CERCLA RQ
Vinyl Acetate	< 0.5	5,000

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS	TSCA SECTION
Silica, Crystalline	14808-60-7	
Vinyl Acetate	108-05-4	12b,

#### CLEAN AIR ACT



# SAFETY DATA SHEET

Date Issued : 10/2/2013  
MSDS No : 11-500  
Date Revised : 11/5/2014  
Revision No : 6

## MIRACLE Glenkote 11-500 Sealflex

Chemical Name	Wt. %	CAS
Vinyl Acetate	< 0.5	108-05-4

### STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Silica, Crystalline	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Vinyl Acetate	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical

### CALIFORNIA PROPOSITION 65

Chemical Name	Wt. %	Listed
Silica, Crystalline	< 0.5	Cancer

### CANADA

#### WHMIS HAZARD SYMBOL AND CLASSIFICATION



### 16. OTHER INFORMATION

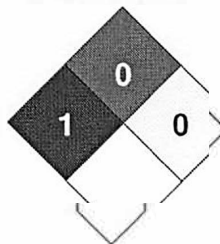
**INFORMATION CONTACT:** (781) 878-7015

**REVISION SUMMARY:** This MSDS replaces the 10/2/2013 MSDS. Revised: Section 2: .

#### HMIS RATING

<b>HEALTH</b>	1
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	0
<b>PERSONAL PROTECTION</b>	B

#### NFPA CODES



**GENERAL STATEMENTS:** Keep out of reach of children  
For professional or industrial use only

**MANUFACTURER DISCLAIMER:** This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

## **SAFETY DATA SHEET**

**Date Issued :** 10/2/2013  
**MSDS No :** 11-500  
**Date Revised :** 11/5/2014  
**Revision No :** 6

### **MIRACLE Glenkote 11-500 Sealflex**

---

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of ITW Polymers Sealants North America. The data on this sheet relates only to the specific material designated herein. ITW Polymers Sealants North America assumes no legal responsibility for use or reliance upon these data.



**GLENKOTE™ SEALFLEX™**  
DUCT SEALANT

**TECHNICAL DATA SHEET**

**PRODUCT DESCRIPTION:**

GLENKOTE™ SEALFLEX™ is a water based sealant/ mastic that is GREENGUARD® GOLD certified and UL 181-B certified.

GLENKOTE™ SEALFLEX™ is designed for indoor and outdoor use on all conventional high, medium or low pressure or high velocity – metal, fiberglass and flexible heating and air conditional duct systems. GLENKOTE™ SEALFLEX™ can also serve as amending or patching membrane for repair.

**ADVANTAGE:**

- Easily applied
- Forms permanent, flexible seal
- Highly resistant to effects of temperature changes
- When cured, impervious to gasoline, oil, grease, weak acids and alkalis

**TYPICAL PROPERTIES:**

Property	Typical Value
Base:	Synthetic Polymer
Solvent:	Water
Shelf Life:	1 year from Date of Manufacture*
Colors:	Cream
Flash Point:	N/A
Weight/ Gallon	9.98 lbs/ gallon
VOC Content	65.5 g/L (EPA Method 24)
Viscosity	190,000 –210,000 cps
Open Time	1 hour
Dry Time	24 - 48 hours
Solids	57.7% ± 2.0%
Coverage	80 sq. feet/ gal depending on application, engineering requirements, and porosity of substrate
Formaldehyde	No urea formaldehyde added during adhesive manufacturing
* The shelf life for an unopened container of this adhesive stored at temperatures between 60°F (15.6°C) and 95°F (35°C) is 1 year from date of manufacture. Store out of direct sunlight in a cool, well-ventilated area. Avoid storing container directly on the floor or against an outside wall	

**DIRECTION FOR USE:**

- Mix thoroughly, taking care to scrape the sides and bottom of container before application
- DO NOT ADD WATER. DO NOT THIN.
- Close container after each use.
- Clean surface, ensuring it is free from grease, oil and dirt. Loose particles and scale should be removed with a wire brush.
- Material may be applied with a brush, roller, trowel or putty knife.
- Clean tools immediately with water.

**For Sealing UL181 Flexible Air Ducts**

- Apply to a clean, dry surface, free of dirt and grease.
- Using a brush, or trowel, apply a 3-inch wide band of mastic around the collar at a coverage rate of 100 square feet/ gallon (26 mils WFT)

**APPLICATION TEMPERATURE RANGE:**

35° F to 120° F

**SERVICE TEMPERATURE RANGE:**

-40° F to 250° F

**SUSTAINABILITY GUIDE:**

- GREENGUARD® GOLD Children & Schools Certified
- GREENGUARD® Indoor Air Quality Certified
- Contributes to LEED® and other green building rating system credits:
  - LEED-NC and LEED-CI EQ Credits 4.1
  - LEED-EB MR Credit 3
  - LEED for Schools EQ Credit
  - LEED Core & Shell EQ Credit 4.1
  - Green Guide for Health Care EQ Credit 4.1
  - NAHB Model Green Home Bldg Guidelines – Sect 7, Global Impact 7.1.3
  - CHPS (Collaborative for High Performance Schools EQ Credit 2.2

**REGULATORY COMPLIANCE:**

**SCAQMD Rule 1168**  
 (South Coast Air Quality Management District)  
 California Air District Regulations  
 Ozone Transport Commission (OTC) Rule for Adhesives and Sealants  
 City of Los Angeles Approved: RR7988  
 Meets SMACNA Seal Classes A, B, C

**INDUSTRY STANDARDS:**

- Meets SMACNA Seal Classes A, B, C
  - City of Los Angeles Approved: RR7988
- Meets requirements of NFPA 90A and 90B
- **ASTM C-411** "Hot Surface Performance of High Temperature Thermal Insulation": After 96 Hours @ 250°F, no cracking, peeling, chalking or other signs of physical failure.
- **ASTM C732** "Aging Effects of Artificial Weathering on Latex Sealants": After 500 hours, no change in the product.
- **ASTM D-2202** "Slump Test": 0.0 inches

**UNDERWRITERS LABORATORIES INC.**  
 Classified: Adhesives R-6891  
 Surface burning characteristic applied to inorganic reinforced cement board  
 Flame Spread.....5  
 Smoke Developed.....5  
 Tested as applied at a coverage rate of 80 sq ft/ gal.  
 Flash point of liquid adhesive (closed cup), no flash to boiling.  
 Underwriters Laboratories Listed 181 B-M 2R59

**KEEP OUT OF REACH OF CHILDREN**  
**FOR PROFESSIONAL OR INDUSTRIAL USE ONLY**  
**USE ONLY WITH APPROVED EQUIPMENT**

**NOTICE TO PURCHASER:**  
 NO WARRANTIES, EXPRESS OR IMPLIED, ARE MADE INCLUDING MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE. EXCEPT FOR PERSONAL INJURY RESULTING FROM USE OF THE PRODUCT AS DIRECTED, ITW POLYMERS SEALANTS NORTH AMERICA, INC. SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY LOSS OR DAMAGE. UNDER NO CIRCUMSTANCES SHALL ITW POLYMERS SEALANTS NORTH AMERICA, INC., A DIVISION OF ILLINOIS TOOL WORKS INC., OR ITS AFFILIATES ("ITW POLYMERS SEALANTS NORTH AMERICA, INC.") BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE, OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. THE USER MAY SEND A SAMPLE OF PRODUCT TO ITW POLYMERS SEALANTS NORTH AMERICA, INC. FOR TESTING. IF SUCH TESTING PROVES A PRODUCT DEFECTIVE, THE USER'S SOLE AND EXCLUSIVE REMEDY IS EITHER REIMBURSEMENT OF THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE CONTAINER OF PRODUCT. NO FABRICATOR, INSTALLER, DEALER, AGENT OR EMPLOYEE OF ITW POLYMERS SEALANTS NORTH AMERICA, INC. HAS THE AUTHORITY TO MODIFY THE OBLIGATIONS OR LIMITATIONS OF THIS.

**WARRANTY:**  
 THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE; THEREFORE, SOME OF THE LIMITATIONS STATED ABOVE MAY NOT APPLY TO YOU. IT IS TO YOUR BENEFIT TO SAVE YOUR DOCUMENTATION UPON PURCHASE OF A PRODUCT. THE INFORMATION AND SUGGESTIONS FOR USE CONTAINED HEREIN ARE BELIEVED TO BE ACCURATE, BUT ARE NOT TO BE CONSTRUED AS WARRANTIES. USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS OR HER INTENDED USE AND SHALL ASSUME ALL RISK ASSOCIATED THEREWITH.

Complete technical information is available from  
 ITW Polymers Sealants North America, Inc.



# Material Safety Data Sheet

Version: 1.7  
09/10/2007

## GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg) Silicone Rubber Sealant

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Manufactured By:** Waterford Plant  
260 Hudson River Rd  
Waterford NY 12188

**Revised:** 09/10/2007  
**Preparer:** PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS  
**CHEMTREC** 1-800-424-9300

**Chemical Family/Use:** Silicone Rubber  
**Formula:** Mixture

#### HMIS

Flammability: 0      Reactivity: 0      Health: 1

#### NFPA

Flammability: 1      Reactivity: 0      Health: 1

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**WARNING!** May be harmful if swallowed, inhaled or absorbed through skin. Irritating to eyes, respiratory system and skin. May cause central nervous system depression. May cause adverse reproductive effects. Adverse reproductive effects reported in animals.

Form: Solid      Color: Translucent      Odor: Ammonia

#### POTENTIAL HEALTH EFFECTS

##### INGESTION

May be harmful if swallowed. May cause central nervous system effects. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

##### SKIN

Uncured product contact will irritate lips, gums and tongue. May cause skin irritation. May be absorbed through skin and produce effects as listed under "Ingestion".

##### INHALATION

Applies in uncured state. May cause respiratory tract irritation. May also cause other effects as listed under "Ingestion".

##### EYES

Eye irritation on contact with the uncured product.

##### MEDICAL CONDITIONS AGGRAVATED

Respiratory disorder Central nervous system disorders. Skin disorders.

##### SUBCHRONIC (TARGET ORGAN )

Liver; Central nervous system

**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)**  
**Silicone Rubber Sealant**

**CHRONIC EFFECTS / CARCINOGENICITY**

This product or one of its ingredients present at 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

**ROUTES OF EXPOSURE**

Dermal; Eyes

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>PRODUCT COMPOSITION</u>	<u>CAS REG NO.</u>	<u>WGT. %</u>
<b><u>A. HAZARDOUS</u></b>		
DISTILLATES, PETROLEUM, HYDROTREATED	64742-47-8	1 - 5 %
Hexamethyldisilazane	999-97-3	1 - 5 %
Methyl trimethoxysilane	1185-55-3	1 - 5 %
<b><u>B. NON-HAZARDOUS</u></b>		
Methoxypolydimethylsiloxane	68037-58-1	60 - 90 %
Polydimethylsiloxane	63148-62-9	10 - 30 %
Treated Filler	68611-44-9	10 - 30 %

**4. FIRST AID MEASURES**

**INGESTION**

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**SKIN**

To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water.

**INHALATION**

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

**EYES**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)  
Silicone Rubber Sealant**

**NOTE TO PHYSICIAN**

Treatment is symptomatic and supportive.

**5. FIRE-FIGHTING MEASURES**

**FLASH POINT:** > 93.3 °C; 200 °F  
**METHOD:** estimated  
**IGNITION TEMPERATURE:** Unknown  
**FLAMMABLE LIMITS IN AIR - LOWER (%):** Not applicable  
**FLAMMABLE LIMITS IN AIR - UPPER (%):** Not applicable

**SENSITIVITY TO MECHANICAL IMPACT:** No

**SENSITIVITY TO STATIC DISCHARGE**

Sensitivity to static discharge is not expected.

**EXTINGUISHING MEDIA**

All standard extinguishing agents are suitable. none

**SPECIAL FIRE FIGHTING PROCEDURES**

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

**6. ACCIDENTAL RELEASE MEASURES**

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**

Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section. Increase area ventilation.

**7. HANDLING AND STORAGE**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Avoid contact with skin and eyes. Remove contact lenses before using sealant. Do not handle lenses until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses and cause severe eye irritation. Use only in well-ventilated areas. Keep container closed when not in use. Product releases methanol during application and curing. Product releases ammonia during application and curing.

**STORAGE**

Store away from heat, sources of ignition, and incompatibles. Keep out of the reach of children.

**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)  
Silicone Rubber Sealant**

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS**

Eyewash stations; Showers; Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

**RESPIRATORY PROTECTION**

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

**PROTECTIVE GLOVES**

Cloth gloves.

**EYE AND FACE PROTECTION**

Safety glasses

**OTHER PROTECTIVE EQUIPMENT**

Wear suitable protective clothing and eye/face protection.

**Exposure Guidelines**

Component	CAS RN	Source	Value
-----------	--------	--------	-------

Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>BOILING POINT - C &amp; F:</b>	Not applicable
<b>VAPOR PRESSURE (20 C) (MM HG):</b>	Not applicable
<b>FREEZING POINT:</b>	Not applicable
<b>MELTING POINT:</b>	Not applicable
<b>PHYSICAL STATE:</b>	Solid
<b>ODOR:</b>	Ammonia
<b>COLOR:</b>	Translucent
<b>EVAPORATION RATE (BUTYL ACETATE=1):</b>	< 1
<b>SPECIFIC GRAVITY (WATER=1):</b>	ca. 1.05
<b>DENSITY:</b>	ca. 1.05 g/cm <sup>3</sup>
<b>ACID / ALKALINITY (MEQ/G):</b>	Unknown
<b>pH:</b>	Not applicable
<b>VOLATILE ORGANIC CONTENT (VOL):</b>	2.2 %(m)
<b>SOLUBILITY IN WATER (20 C):</b>	Negligible



**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)**  
**Silicone Rubber Sealant**

---

**SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):** Toluene  
**VOC EXCL. H2O & EXEMPTS (G/L):** 27

**10. STABILITY AND REACTIVITY**

**STABILITY**  
Stable

**HAZARDOUS POLYMERIZATION**  
Will not occur.

**HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS**  
Carbon monoxide; Carbon dioxide (CO<sub>2</sub>); Silicon dioxide.; Methanol; Formaldehyde; Ammonia

**INCOMPATIBILITY (MATERIALS TO AVOID)**  
None known.

**CONDITIONS TO AVOID**  
Vapor and/or liquid react with water to form ammonia. Applies in uncured state.

**11. TOXICOLOGICAL INFORMATION**

**ACUTE ORAL**  
Remarks: Unknown

**ACUTE DERMAL**  
Remarks: Unknown

**ACUTE INHALATION**  
Remarks: Unknown

**OTHER**  
None., Contains dibutyltin compound(s) - May impair fertility. May cause harm to unborn child.

**SENSITIZATION**  
No data available

**SKIN IRRITATION**  
No data available

**EYE IRRITATION**  
No data available

**MUTAGENICITY**  
Unknown

**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)**  
**Silicone Rubber Sealant**

**OTHER EFFECTS OF OVEREXPOSURE**

This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive., Methanol released during curing.

**12. ECOLOGICAL INFORMATION**

**ECOTOXICITY**

Ecotoxicological data for this product is not available.

**DISTRIBUTION**

No data available

**CHEMICAL FATE**

No data available

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD**

Disposal should be made in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION**

**Further Information:**

This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

**15. REGULATORY INFORMATION**

**Inventories**

Canada DSL Inventory	y (Positive listing)
Korea Existing Chemicals Inventory (KECI)	y (Positive listing)
China Inventory of Existing Chemical Substances	y (Positive listing)
Australia Inventory of Chemical Substances (AICS)	y (Positive listing)
Philippines Inventory of Chemicals and Chemical	y (Positive listing)

**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)**  
**Silicone Rubber Sealant**

---

**Substances (PICCS)**

EU list of existing chemical substances y (Positive listing)

Canada NDSL Inventory n (Negative listing)

Japan Inventory of Existing & New Chemical Substances (ENCS) n (Negative listing)

TSCA list y (Positive listing)

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

**US Regulatory Information**

**SARA (311,312) HAZARD CLASS**

Acute Health Hazard; Chronic Health Hazard

**SARA (313) CHEMICALS**

58-36-6, 10, 10'-oxybisphenoxarsine

**Canadian Regulatory Information**

**WHMIS HAZARD CLASS**

D2A VERY TOXIC MATERIALS, D2B TOXIC MATERIALS

**Other**

**SCHDLE B/HTSUS:** 3214.10 Mastic Based on Rubber

**ECCN:** EAR99

**CALIFORNIA PROPOSITION 65**

Warning! This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

58-36-6, 10, 10'-OXYBISPHENOXARSINE. 108-88-3, Toluene.

**16. OTHER INFORMATION**

**OTHER**

C = ceiling limit      NEGL = negligible      EST = estimated      NF = none found      NA = not applicable  
UNKN = unknown      NE = none established      REC = recommended      ND = none determined  
V = recommended by vendor      SKN = skin      TS = trade secret      R = recommended  
MST = mist      NT = not tested      STEL = short term exposure limit ppm = parts per million  
ppb = parts per billion      By-product = reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2)., These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.



**MOMENTIVE**  
performance materials

# Material Safety Data Sheet

Version: 1.7  
09/10/2007

**GE5000 12C-Crtrg (0.730 Lbs-0.331 Kg)**  
**Silicone Rubber Sealant**

---

# SAFETY DATA SHEET

# Roofmaster Paint

## 1. Identification

**Product identifier** CHARCOAL 325020 FLASHING PAINT

**Other means of identification**

**Product code** 325020

**Recommended use** Roof flashing paint

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** ROOFMASTER PRODUCTS COMPANY

**Address** 750 MONTEREY PASS ROAD  
MONTEREY PARK, CA 91754-3607  
United States

**Telephone** 1(323) 261-5122

**E-mail** Not available.

**Emergency phone number** 1(800) 255-3924 [Chem-Tel]

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable aerosols	Category 1
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Reproductive toxicity (fertility, the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
<b>Environmental hazards</b>	Specific target organ toxicity, repeated exposure	Category 1
	Hazardous to the aquatic environment, acute hazard	Category 2
<b>OSHA defined hazards</b>	Hazardous to the aquatic environment, long-term hazard	Category 2
	Not classified.	

**Label elements**



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging the unborn child. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

<b>Response</b>	If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep 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 exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	85.49% of the mixture consists of component(s) of unknown acute oral toxicity. 94.87% of the mixture consists of component(s) of unknown acute dermal toxicity. 83.84% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 83.84% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
ACETONE		67-64-1	30-45
BUTANE		106-97-8	10-25
PROPANE		74-98-6	10-25
ETHYL BENZENE		100-41-4	<10
n-BUTYL ALCOHOL		71-36-3	<10
TALC		14807-96-6	<10
TOLUENE		108-88-3	<10
XYLENE		1330-20-7	<10
CARBON BLACK		1333-86-4	<1
TITANIUM DIOXIDE		13463-67-7	<1
ZINC OXIDE		1314-13-2	<1
ZINC PHOSPHATE		7779-90-0	<1

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Remove contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

**Suitable extinguishing media** Powder. Alcohol resistant foam. Carbon dioxide (CO2).

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 3 Aerosol.  Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3 1000 ppm	
CARBON BLACK (CAS 1333-86-4)	PEL	3.5 mg/m3	
ETHYL BENZENE (CAS 100-41-4)	PEL	435 mg/m3 100 ppm	

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
n-BUTYL ALCOHOL (CAS 71-36-3)	PEL	300 mg/m3	
PROPANE (CAS 74-98-6)	PEL	100 ppm 1800 mg/m3 1000 ppm	
TITANIUM DIOXIDE (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
XYLENE (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm	
ZINC OXIDE (CAS 1314-13-2)	PEL	5 mg/m3 5 mg/m3 15 mg/m3	Respirable fraction. Fume. Total dust.

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

Components	Type	Value
TOLUENE (CAS 108-88-3)	Ceiling TWA	300 ppm 200 ppm

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	Form
TALC (CAS 14807-96-6)	TWA	0.3 mg/m3 0.1 mg/m3 20 mppcf 2.4 mppcf	Total dust. Respirable. Respirable.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
ACETONE (CAS 67-64-1)	STEL TWA	750 ppm 500 ppm	
BUTANE (CAS 106-97-8)	STEL	1000 ppm	
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
ETHYL BENZENE (CAS 100-41-4)	TWA	20 ppm	
n-BUTYL ALCOHOL (CAS 71-36-3)	TWA	20 ppm	
TALC (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
TITANIUM DIOXIDE (CAS 13463-67-7)	TWA	10 mg/m3	
TOLUENE (CAS 108-88-3)	TWA	20 ppm	
XYLENE (CAS 1330-20-7)	STEL TWA	150 ppm 100 ppm	
ZINC OXIDE (CAS 1314-13-2)	STEL TWA	10 mg/m3 2 mg/m3	Respirable fraction. Respirable fraction.

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
ETHYL BENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g 0.03 mg/l	o-Cresol, with hydrolysis Toluene	Creatinine in urine Urine	* *



**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
	0.02 mg/l	Toluene	Blood	*
XYLENE (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines**

**US - California OELs: Skin designation**

n-BUTYL ALCOHOL (CAS 71-36-3) Can be absorbed through the skin.  
 TOLUENE (CAS 108-88-3) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

n-BUTYL ALCOHOL (CAS 71-36-3) Skin designation applies.  
 TOLUENE (CAS 108-88-3) Skin designation applies.

**US - Tennessee OELs: Skin designation**

n-BUTYL ALCOHOL (CAS 71-36-3) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

n-BUTYL ALCOHOL (CAS 71-36-3) Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per 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. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance**

**Physical state** Liquid.

**Form** Aerosol.

**Color** Dark grey

**Odor** Solvent.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** -43.78 °F (-42.1 °C) estimated

**Flash point** -133.6 °F (-92.0 °C) estimated

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** 1.3 % estimated

**Flammability limit - upper (%)** 12.8 % estimated

**Explosive limit - lower (%)** Not available.

<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	2148.52 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	550 °F (287.78 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	6.68 lb/gal
<b>Flammability class</b>	Flammable IA estimated
<b>Percent volatile</b>	79.7 %w/w
<b>Specific gravity</b>	0.8
<b>VOC (Weight %)</b>	338.26 g/l MATERIAL 545.04 g/l COATING

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Nitrates. Halogens. Fluorine. Chlorine.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Harmful in contact with skin. Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

### Information on toxicological effects

<b>Acute toxicity</b>	Harmful in contact with skin. Harmful if swallowed. Narcotic effects.
<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Suspected of causing cancer.

### IARC Monographs. Overall Evaluation of Carcinogenicity

CARBON BLACK (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
ETHYL BENZENE (CAS 100-41-4)	2B Possibly carcinogenic to humans.
TALC (CAS 14807-96-6)	2B Possibly carcinogenic to humans.

TITANIUM DIOXIDE (CAS 13463-67-7)  
 TOLUENE (CAS 108-88-3)  
 XYLENE (CAS 1330-20-7)

3 Not classifiable as to carcinogenicity to humans.  
 2B Possibly carcinogenic to humans.  
 3 Not classifiable as to carcinogenicity to humans.  
 3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not available.

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging fertility. Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

**12. Ecological information**

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
<b>ACETONE (CAS 67-64-1)</b>			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
<b>ETHYL BENZENE (CAS 100-41-4)</b>			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours
		Fathead minnow (Pimephales promelas)	11.5 - 12.7 mg/l, 96 hours
<b>n-BUTYL ALCOHOL (CAS 71-36-3)</b>			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	1897 - 2072 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	100 - 500 mg/l, 96 hours
<b>TITANIUM DIOXIDE (CAS 13463-67-7)</b>			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours
<b>TOLUENE (CAS 108-88-3)</b>			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	19.6 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	14.1 - 17.16 mg/l, 96 hours
<b>XYLENE (CAS 1330-20-7)</b>			
<b>Aquatic</b>			
Fish	LC50	Bluegill (Lepomis macrochirus)	10.464 - 16.114 mg/l, 96 hours
			7.711 - 9.591 mg/l, 96 hours
<b>ZINC OXIDE (CAS 1314-13-2)</b>			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	2246 mg/l, 96 hours

Components	Species	Test Results
ZINC PHOSPHATE (CAS 7779-90-0)		
Aquatic		
Fish	LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss)	0.09 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

Partition coefficient n-octanol / water (log Kow)	
ACETONE	-0.24
BUTANE	2.89
ETHYL BENZENE	3.15
n-BUTYL ALCOHOL	0.88
PROPANE	2.36
TOLUENE	2.73
XYLENE	3.12 - 3.2

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

**14. Transport information**

**DOT**

<b>UN number</b>	Not available.
<b>UN proper shipping name</b>	Consumer commodity
<b>Transport hazard class(es)</b>	
<b>Class</b>	ORM-D
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	None
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	Limited Quantity
<b>Packaging exceptions</b>	156, 306
<b>Packaging non bulk</b>	156, 306
<b>Packaging bulk</b>	None

**IATA**

<b>UN number</b>	ID8000
<b>UN proper shipping name</b>	Consumer commodity
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	ORM-D
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Other information**

Passenger and cargo aircraft Allowed.  
Cargo aircraft only Allowed.

**IMDG**

UN number UN1950  
UN proper shipping name Aerosols, flammable  
Transport hazard class(es)  
Class 2.1  
Subsidiary risk -  
Label(s) 2.1  
Packing group Not applicable.  
Environmental hazards  
Marine pollutant No.  
EmS F-D, S-U  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

**IMDG**



**15. Regulatory information**

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
One or more components are not listed on TSCA.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

ACETONE (CAS 67-64-1)	Listed.
BUTANE (CAS 106-97-8)	Listed.
ETHYL BENZENE (CAS 100-41-4)	Listed.
n-BUTYL ALCOHOL (CAS 71-36-3)	Listed.
PROPANE (CAS 74-98-6)	Listed.
TOLUENE (CAS 108-88-3)	Listed.
XYLENE (CAS 1330-20-7)	Listed.
ZINC OXIDE (CAS 1314-13-2)	Listed.
ZINC PHOSPHATE (CAS 7779-90-0)	Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

Hazard categories Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
ETHYL BENZENE	100-41-4	<10
n-BUTYL ALCOHOL	71-36-3	<10
TOLUENE	108-88-3	<10
XYLENE	1330-20-7	<10
ZINC OXIDE	1314-13-2	<1
ZINC PHOSPHATE	7779-90-0	<1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

ETHYL BENZENE (CAS 100-41-4)  
TOLUENE (CAS 108-88-3)  
XYLENE (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

BUTANE (CAS 106-97-8)  
PROPANE (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

ACETONE (CAS 67-64-1) 6532  
TOLUENE (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

ACETONE (CAS 67-64-1) 35 %WV  
TOLUENE (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

ACETONE (CAS 67-64-1) 6532  
TOLUENE (CAS 108-88-3) 594

US state regulations

US - California Candidate Chemicals: Listed

ACETONE (CAS 67-64-1)  
BUTANE (CAS 106-97-8)  
CARBON BLACK (CAS 1333-86-4)  
TALC (CAS 14807-96-6)  
TITANIUM DIOXIDE (CAS 13463-67-7)

US - California Candidate Chemicals: Listed on initial list

ETHYL BENZENE (CAS 100-41-4)  
TOLUENE (CAS 108-88-3)  
XYLENE (CAS 1330-20-7)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.

US. Massachusetts RTK - Substance List

ACETONE (CAS 67-64-1)  
BUTANE (CAS 106-97-8)  
CARBON BLACK (CAS 1333-86-4)  
ETHYL BENZENE (CAS 100-41-4)  
n-BUTYL ALCOHOL (CAS 71-36-3)  
PROPANE (CAS 74-98-6)  
TALC (CAS 14807-96-6)  
TITANIUM DIOXIDE (CAS 13463-67-7)  
TOLUENE (CAS 108-88-3)  
XYLENE (CAS 1330-20-7)  
ZINC OXIDE (CAS 1314-13-2)

US. New Jersey Worker and Community Right-to-Know Act

ACETONE (CAS 67-64-1)  
BUTANE (CAS 106-97-8)  
CARBON BLACK (CAS 1333-86-4)  
ETHYL BENZENE (CAS 100-41-4)

n-BUTYL ALCOHOL (CAS 71-36-3)  
 PROPANE (CAS 74-98-6)  
 TALC (CAS 14807-96-6)  
 TITANIUM DIOXIDE (CAS 13463-67-7)  
 TOLUENE (CAS 108-88-3)  
 XYLENE (CAS 1330-20-7)  
 ZINC OXIDE (CAS 1314-13-2)  
 ZINC PHOSPHATE (CAS 7779-90-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

ACETONE (CAS 67-64-1)  
 BUTANE (CAS 106-97-8)  
 CARBON BLACK (CAS 1333-86-4)  
 ETHYL BENZENE (CAS 100-41-4)  
 n-BUTYL ALCOHOL (CAS 71-36-3)  
 PROPANE (CAS 74-98-6)  
 TALC (CAS 14807-96-6)  
 TITANIUM DIOXIDE (CAS 13463-67-7)  
 TOLUENE (CAS 108-88-3)  
 XYLENE (CAS 1330-20-7)  
 ZINC OXIDE (CAS 1314-13-2)

**US. Rhode Island RTK**

ACETONE (CAS 67-64-1)  
 BUTANE (CAS 106-97-8)  
 ETHYL BENZENE (CAS 100-41-4)  
 n-BUTYL ALCOHOL (CAS 71-36-3)  
 PROPANE (CAS 74-98-6)  
 TOLUENE (CAS 108-88-3)  
 XYLENE (CAS 1330-20-7)  
 ZINC OXIDE (CAS 1314-13-2)  
 ZINC PHOSPHATE (CAS 7779-90-0)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

BENZENE (CAS 71-43-2)	Listed: February 27, 1987
CARBON BLACK (CAS 1333-86-4)	Listed: February 21, 2003
CRYSTALLINE QUARTZ SILICA (CAS 14808-60-7)	Listed: October 1, 1988
ETHYL BENZENE (CAS 100-41-4)	Listed: June 11, 2004
FORMALDEHYDE (CAS 50-00-0)	Listed: January 1, 1988
TITANIUM DIOXIDE (CAS 13463-67-7)	Listed: September 2, 2011

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
TOLUENE (CAS 108-88-3)	Listed: January 1, 1991

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

TOLUENE (CAS 108-88-3)	Listed: August 7, 2009
------------------------	------------------------

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
-----------------------	---------------------------

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information, including date of preparation or last revision

Issue date	06-07-2016
Revision date	06-12-2016
Version #	02
HMSI® ratings	Health: 2* Flammability: 4 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 4 Instability: 0

NFPA ratings



Disclaimer

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.



# HOJA DE DATOS DE SEGURIDAD **Roof master Paint**

## 1. Identificación

**Identificador de producto** CHARCOAL 325020 FLASHING PAINT

**Otros medios de identificación**  
**Código de producto** 325020

**Uso recomendado** Roof flashing paint

**Restricciones recomendadas** Ninguno conocido/Ninguna conocida.

**Información sobre el fabricante/importador/proveedor/distribuidor**  
**Fabricante**  
**Nombre de la empresa** ROOFMASTER PRODUCTS COMPANY  
**Dirección** 750 MONTEREY PASS ROAD  
 MONTEREY PARK, CA 91754-3607  
 Estados Unidos  
**Teléfono** 1(323) 261-5122  
**Correo electrónico** No se dispone.  
**Número de teléfono para emergencias** 1(800) 255-3924 [Chem-Tel]

## 2. Identificación de peligros

<b>Peligros físicos</b>	Aerosoles inflamables	Categoría 1
<b>Peligros para la salud</b>	Toxicidad aguda por vía oral	Categoría 4
	Toxicidad aguda por vía cutánea	Categoría 4
	Corrosión/irritación cutáneas	Categoría 2
	Lesiones oculares graves/irritación ocular	Categoría 2A
	Carcinogenicidad	Categoría 2
	Toxicidad para la reproducción (fertilidad, el niño nonato)	Categoría 2
	Toxicidad sistémica específica de órganos diana (exposición única)	Categoría 3, efectos narcóticos
<b>Peligros para el medio ambiente</b>	Toxicidad sistémica específica de órganos diana (exposiciones repetidas)	Categoría 1
	Peligro para el medio ambiente acuático, peligro agudo	Categoría 2
<b>Peligros definidos por OSHA</b>	Peligro para el medio ambiente acuático, peligro a largo plazo	Categoría 2
	No clasificado.	

### Elementos de la etiqueta



**Palabra de advertencia**  
**Indicación de peligro**

**Peligro**  
 Aerosol extremadamente inflamable. Nocivo en caso de ingestión. Nocivo en contacto con la piel. Provoca irritación cutánea. Provoca irritación ocular grave. Puede provocar somnolencia o vértigo. Susceptible de provocar cáncer. Susceptible de dañar al feto. Susceptible de perjudicar la fertilidad. Provoca daños en los órganos tras exposiciones prolongadas o repetidas. Tóxico para los organismos acuáticos. Tóxico para los organismos acuáticos, con efectos nocivos duraderos.

## Consejos de prudencia

### Prevención

Procurarse las instrucciones antes del uso. No manipular antes de haber leído y comprendido todas las precauciones de seguridad. Mantener alejado del calor/de chispas/de llamas al descubierto/de superficies calientes. – No fumar. No vaporizar sobre una llama al descubierto o cualquier otra fuente de ignición. Recipiente a presión: No perforar ni quemar, incluso después del uso. No respirar nieblas o vapores. Lavarse cuidadosamente después de la manipulación. No comer, beber o fumar mientras se manipula este producto. Usar solo al aire libre o en un lugar bien ventilado. No dispersar en el medio ambiente. Usar guantes/ropa de protección/equipo de protección para los ojos/la cara.

### Respuesta

En caso de ingestión: Llamar a un CENTRO DE TOXICOLOGÍA o a un médico si la persona se encuentra mal. En caso de contacto con la piel: Lavar con abundante agua. En caso de inhalación: Transportar la persona al aire libre y mantenerla en una posición que le facilite la respiración. En caso de contacto con los ojos: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado. En caso de exposición demostrada o supuesta: consultar a un médico. Llamar a un CENTRO DE TOXICOLOGÍA o a un médico si la persona se encuentra mal. Enjuagarse la boca. En caso de irritación cutánea: Consultar a un médico. Si la irritación ocular persiste, consultar a un médico. Quitar la ropa contaminada y lavarla antes de volverla a usar. Recoger los vertidos.

### Almacenamiento

Almacenar en un lugar bien ventilado. Guardar el recipiente herméticamente cerrado. Guardar bajo llave. Proteger de la luz solar. No exponer a una temperatura superior a 50 °C/122 °F.

### Eliminación

Eliminar el contenido/recipiente conforme a las reglamentaciones local/regional/nacional/internacional.

### Peligros no clasificados en otra parte (HNOC, por sus siglas en inglés)

Ninguno conocido/Ninguna conocida.

### Información suplementaria

La mezcla contiene un 85.49 % de componentes de toxicidad oral aguda desconocida. (El 94.87% de la mezcla consiste en uno o varios componentes de toxicidad aguda desconocida por vía cutánea.) El 83.84% de la mezcla está constituido por uno o varios componentes de peligro(s) agudo(s) desconocido(s) para el medio ambiente acuático. La mezcla contiene un 83.84 % de componentes de toxicidad a largo plazo para el medio ambiente acuático desconocida.

## 3. Composición/información sobre los componentes

### Mezclas

Nombre químico	Nombre común y sinónimos	Número CAS	%
ACETONA		67-64-1	30-45
BUTANO		106-97-8	10-25
propano		74-98-6	10-25
ETIL-BENCENO		100-41-4	<10
n-butil alcohol		71-36-3	<10
TALCO (SIN FIBRAS DE ASBESTO)		14807-96-6	<10
TOLUENO		108-88-3	<10
XILENO		1330-20-7	<10
NEGRO DE HUMO		1333-86-4	<1
DIÓXIDO DE TITANIO		13463-67-7	<1
ÓXIDO DE ZINC		1314-13-2	<1
ZINC PHOSPHATE		7779-90-0	<1

\* Designa que una identidad química específica y/o el porcentaje de su composición han sido retenidos como secreto comercial.

## 4. Primeros auxilios

### Inhalación

Transportar a la víctima al aire libre y mantenerla en reposo una posición que le facilite la respiración. Llamar a un CENTRO DE TOXICOLOGÍA/médico si la persona se encuentra mal.

### Contacto con la cutánea

Quitar la ropa contaminada. Enjuagar la piel con agua/ ducharse. Consultar a un médico si la persona se encuentra mal. En caso de irritación cutánea: Consultar a un médico. Lavar la ropa contaminada antes de volverla a usar.

<b>Contacto con los ocular</b>	Enjuague los ojos de inmediato con abundante agua durante al menos 15 minutos. Quitar las lentes de contacto, cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado. Busque atención médica si la irritación se desarrolla y persiste.
<b>Ingestión</b>	Enjuagarse la boca. En caso de vómito, colocar la cabeza a un nivel más bajo que el estómago para evitar que el vómito entre en los pulmones. Consultar a un médico si la persona se encuentra mal.
<b>Sintomas/efectos más importantes, agudos o retardados</b>	Puede provocar somnolencia y vértigo. Dolor de cabeza. Náusea, vómitos. Grave irritación de los ojos. Los síntomas pueden incluir escozor, lagrimeo, enrojecimiento, hinchazón y visión borrosa. Irritación de la piel. Puede causar enrojecimiento y dolor. Una exposición prolongada puede producir efectos crónicos.
<b>Indicación de la necesidad de recibir atención médica inmediata y, en su caso, de tratamiento especial</b>	Proporcione las medidas de apoyo generales y de tratamiento sintomático. Mantenga a la víctima abrigada. Mantenga a la víctima bajo observación. Los síntomas pueden retrasarse.
<b>Información General</b>	EN CASO DE exposición demostrada o supuesta: consultar a un médico. En caso de malestar, acuda al médico (si es posible, muéstrele la etiqueta). Asegúrese de que el personal médico tenga conocimiento de los materiales involucrados y tome las precauciones adecuadas para su propia protección. Muéstrele esta ficha de seguridad al doctor que esté de servicio.

## 5. Medidas de lucha contra incendios

<b>Medios de extinción apropiados</b>	Polvo. Espuma resistente al alcohol. Bióxido de carbono (CO2).
<b>Medios no adecuados de extinción</b>	No utilizar agua a presión, puede extender el incendio.
<b>Peligros específicos del producto químico</b>	Contenido bajo presión. El envase a presión puede explotar cuando se expone al calor o a la llama. En caso de incendio se pueden formar gases nocivos.
<b>Equipo especial de protección y medias de precaución para los bomberos</b>	Los bomberos deben utilizar equipo de protección estándar incluyendo chaqueta ignífuga, casco con careta, guantes, botas de hule y en espacios cerrados, equipo de respiración autónomo o SCBA (por sus siglas en inglés).
<b>Equipos/instrucciones para la lucha contra incendios</b>	Mueva los recipientes del área del incendio si puede hacerlo sin riesgo. Los contenedores deberían refrigerarse con agua para evitar que suba la presión del vapor. Al combatir incendios masivos en el área de carga, utilizar manguera no-tripulada o monitor de boquillas, si es posible. Si no, retirarse y dejar que prosiga el incendio hasta que se apague.
<b>Métodos específicos</b>	Utilice procedimientos contra incendios estándar y considere los riesgos de otros materiales involucrados. Mueva los recipientes del área del incendio si puede hacerlo sin riesgo. En caso de incendio o de explosión, no respire los humos.
<b>Riesgos generales de incendio</b>	Aerosol extremadamente inflamable.

## 6. Medidas que deben tomarse en caso de vertido accidental

<b>Precauciones personales, equipo protector y procedimiento de emergencia</b>	Mantenga alejado al personal que no sea necesario. Mantenga alejadas a las personas de la zona de la fuga y en sentido opuesto al viento. Use equipo y ropa de protección apropiados durante la limpieza. No respirar nieblas o vapores. No toque los recipientes dañados o el material derramado a menos que esté usando ropa protectora adecuada. Ventilar los espacios cerrados antes de entrar. Las autoridades locales deben ser informadas si los derrames importantes no pueden contenerse. Para información sobre protección personal, véase la sección 8.
<b>Métodos y materiales para la contención y limpieza de vertidos</b>	Consulte las fichas de datos de seguridad adjuntas y/o instrucciones para su uso. Mantenga los materiales combustibles (madera, papel, petróleo, etc.) lejos del material derramado. Detenga la fuga si puede hacerlo sin riesgo. Lleve el tanque a un área segura y abierta si la fuga es irreparable. Cubrir con una lámina de plástico para evitar la dispersión. Absorber en vermiculita, arena o tierra seca y colocar en recipientes. Evite que el producto vaya al alcantarillado. Después de recuperar el producto, enjuague el área con agua.  Derrames pequeños: Limpie con material absorbente (por ejemplo tela, vellón). Limpie cuidadosamente la superficie para eliminar los restos de contaminación. Para información sobre la eliminación, véase la sección 13.
<b>Precauciones relativas al medio ambiente</b>	No dispersar en el medio ambiente. Impidas nuevos escapes o derrames de forma segura. No verter los residuos al desagüe, al suelo o las corrientes de agua. Informar al personal administrativo o de supervisión pertinente de todos los escapes al medio ambiente.

## 7. Manipulación y almacenamiento

### Precauciones para un manejo seguro

Procurarse las instrucciones antes del uso. No manipular antes de haber leído y comprendido todas las precauciones de seguridad. Recipiente a presión: No perforar ni quemar, incluso después del uso. No utilizar si falta el botón pulverizador o está defectuoso. No lo pulverice sobre llamas o cualquier otro material incandescente. No fume mientras utilice el producto o hasta que la superficie pulverizada se haya secado bien. No corte, suelde, taladre, esmerile ni esponga los recipientes al calor, llama, chispas ni otras fuentes de ignición. Todo el equipo que se utiliza al manejar el producto debe estar conectado a tierra. No reutilice los recipientes vacíos. No respirar nieblas o vapores. Evítese el contacto con los ojos, la piel y la ropa. Evitar la exposición prolongada. No degustar o ingerir el producto. Mientras se utiliza, se prohíbe comer, beber o fumar. Las mujeres embarazadas o lactantes no deben manipular este producto. De ser posible, debe manejarse en sistemas cerrados. Úsese únicamente en lugares bien ventilados. Use equipo protector personal adecuado. Lavarse las manos cuidadosamente después de la manipulación. No dispersar en el medio ambiente. Lavar la ropa contaminada antes de volverla a usar. Respete las normas para un manejo correcto de los químicos.

### Condiciones de almacenamiento seguro, incluidas cualesquiera incompatibilidades

Aerosol de Nivel 3.

Guardar bajo llave. Recipiente a presión. Protéjalo de los rayos solares y evite exponerlo a temperaturas superiores a 50 °C. No punzar, incinerar ni aplastar. No manipule ni guarde cerca del fuego, calor u otras fuentes de ignición. Este material puede acumular cargas estáticas que pueden causar chispas y volverse una fuente de ignición. Manténgase fuera del alcance de los niños. Consérvese alejado de materiales incompatibles (consulte la Sección 10 de la HDS).

## 8. Controles de exposición/protección personal

### Límite(s) de exposición ocupacional

#### EE.UU. OSHA Tabla Z-2 (29 CFR 1910.1000)

Componentes	Tipo	Valor
TOLUENO (CAS 108-88-3)	TWA	200 ppm
	Valor techo	300 ppm

#### EEUU. OSHA Tabla Z-3 (29 CFR 1910.1000)

Componentes	Tipo	Valor	Forma
TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)	TWA	0.3 mg/m <sup>3</sup>	Polvo total.
		0.1 mg/m <sup>3</sup>	Respirable.
		20 mppcf	Respirable.
		2.4 mppcf	Respirable.

#### OSHA de USA - Tabla Z-1 - Límites para los contaminantes del aire (29 CFR 1910.1000)

Componentes	Tipo	Valor	Forma
ACETONA (CAS 67-64-1)	Límite de Exposición Permisible (LEP)	2400 mg/m <sup>3</sup>	
DIÓXIDO DE TITANIO (CAS 13463-67-7)	Límite de Exposición Permisible (LEP)	1000 ppm	Polvo total.
		15 mg/m <sup>3</sup>	
ETIL-BENCENO (CAS 100-41-4)	Límite de Exposición Permisible (LEP)	435 mg/m <sup>3</sup>	
n-butil alcohol (CAS 71-36-3)	Límite de Exposición Permisible (LEP)	100 ppm	
		300 mg/m <sup>3</sup>	
NEGRO DE HUMO (CAS 1333-86-4)	Límite de Exposición Permisible (LEP)	3.5 mg/m <sup>3</sup>	
ÓXIDO DE ZINC (CAS 1314-13-2)	Límite de Exposición Permisible (LEP)	5 mg/m <sup>3</sup>	Fracción respirable.
		5 mg/m <sup>3</sup>	
propano (CAS 74-98-6)	Límite de Exposición Permisible (LEP)	15 mg/m <sup>3</sup>	Humo.
		1800 mg/m <sup>3</sup>	Polvo total.
XILENO (CAS 1330-20-7)	Límite de Exposición Permisible (LEP)	1000 ppm	
		435 mg/m <sup>3</sup>	
		100 ppm	

**EE.UU. Valores umbrales ACGIH**

Componentes	Tipo	Valor	Forma
ACETONA (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
BUTANO (CAS 106-97-8)	STEL	1000 ppm	
DIÓXIDO DE TITANIO (CAS 13463-67-7)	TWA	10 mg/m3	
ETIL-BENCENO (CAS 100-41-4)	TWA	20 ppm	
n-butil alcohol (CAS 71-36-3)	TWA	20 ppm	
NEGRO DE HUMO (CAS 1333-86-4)	TWA	3 mg/m3	Fracción inhalable.
ÓXIDO DE ZINC (CAS 1314-13-2)	STEL	10 mg/m3	Fracción respirable.
	TWA	2 mg/m3	Fracción respirable.
TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)	TWA	2 mg/m3	Fracción respirable.
TOLUENO (CAS 108-88-3)	TWA	20 ppm	
XILENO (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

**Valores límites biológicos**

**Índices de exposición biológica de ACGIH**

Componentes	Valor	Determinante	Espécimen	Hora de muestreo
ACETONA (CAS 67-64-1)	50 mg/l	Acetona	orina	*
ETIL-BENCENO (CAS 100-41-4)	0.15 g/g	Suma del ácido mandélico y el ácido fenilgloxílico	Creatinina en orina	*
TOLUENO (CAS 108-88-3)	0.3 mg/g	o-Cresol, con hidrólisis	Creatinina en orina	*
	0.03 mg/l	Tolueno	orina	*
	0.02 mg/l	Tolueno	sangre	*
XILENO (CAS 1330-20-7)	1.5 g/g	Ácidos metilhipúricos	Creatinina en orina	*

\* - Consultar los detalles del muestreo en el documento original.

**Directrices de exposición**

**EE.UU. - California OELs: Designación cutánea**

n-butil alcohol (CAS 71-36-3)

Puede ser absorbido a través de la piel.

TOLUENO (CAS 108-88-3)

Puede ser absorbido a través de la piel.

**Minnesota, EUA – Sustancias Peligrosas: Se aplica la denominación para la piel**

n-butil alcohol (CAS 71-36-3)

Se aplica designación cutánea.

TOLUENO (CAS 108-88-3)

Se aplica designación cutánea.

**US - Tennessee OELs: Designación cutánea**

n-butil alcohol (CAS 71-36-3)

Puede ser absorbido a través de la piel.

**US NIOSH Guía de bolsillo sobre Riesgos Químicos: Designación cutánea**

n-butil alcohol (CAS 71-36-3)

Puede ser absorbido a través de la piel.

**Controles de ingeniería adecuados**

Debe haber una ventilación general adecuada (típicamente 10 renovaciones del aire por hora). La frecuencia de la renovación del aire debe corresponder a las condiciones. De ser posible, use campanas extractoras, ventilación aspirada local u otras medidas técnicas para mantener los niveles de exposición por debajo de los límites de exposición recomendados. Si no se han establecido ningunos límites de exposición, el nivel de contaminantes suspendidos en el aire ha de mantenerse a un nivel aceptable. Deberá haber facilidades para lavarse los ojos y ducha de emergencia cuando se manipule este producto.

**Medidas de protección individual, como equipos de protección personal recomendados**

**Protección para los ojos/la cara** Equipo respiratorio con cartucho de vapor orgánico y pantalla facial.

<b>Protección cutánea</b>	
<b>Protección para las manos</b>	Use guantes adecuados resistentes a los productos químicos. El suministrador de guantes puede recomendar guantes adecuados.
<b>Otros</b>	Use ropa adecuada resistente a los productos químicos. Se recomienda el uso de delantal impermeable.
<b>Protección respiratoria</b>	Equipo respiratorio con cartucho de vapor orgánico y pantalla facial.
<b>Peligros térmicos</b>	Llevar ropa adecuada de protección térmica, cuando sea necesario.
<b>Consideraciones generales sobre higiene</b>	No fumar durante su utilización. Manténgase apartado de bebidas y alimentos. Seguir siempre buenas medidas de higiene personal, como lavarse después de manejar el material y antes de comer, beber y/o fumar. Rutinariamente lave la ropa de trabajo y el equipo de protección para eliminar los contaminantes.

## 9. Propiedades físicas y químicas

### Apariencia

<b>Estado físico</b>	Líquido.
<b>Forma</b>	aerosol
<b>Color</b>	Gris oscuro
<b>Olor</b>	Disolvente.
<b>Umbral olfativo</b>	No se dispone.
<b>pH</b>	No se dispone.
<b>Punto de fusión/punto de congelación</b>	No se dispone.
<b>Punto inicial e intervalo de ebullición</b>	-42.1 °C (-43.78 °F) estimado
<b>Punto de inflamación</b>	-92.0 °C (-133.6 °F) estimado
<b>Tasa de evaporación</b>	No se dispone.
<b>Inflamabilidad (sólido, gas)</b>	No aplicable.

### Límites superior/inferior de inflamabilidad o explosividad

<b>Límite inferior de inflamabilidad (%)</b>	1.3 % estimado
<b>Límite superior de inflamabilidad (%)</b>	12.8 % estimado
<b>Límite inferior de explosividad (%)</b>	No se dispone.
<b>Límite de explosividad superior (%)</b>	No se dispone.
<b>Presión de vapor</b>	2148.52 hPa estimado
<b>Densidad de vapor</b>	No se dispone.
<b>Densidad relativa</b>	No se dispone.
<b>Solubilidad(es)</b>	
<b>Solubilidad (agua)</b>	No se dispone.
<b>Coefficiente de reparto: n-octanol/agua</b>	No se dispone.
<b>Temperatura de auto-inflamación</b>	287.78 °C (550 °F) estimado
<b>Temperatura de descomposición</b>	No se dispone.
<b>Viscosidad</b>	No se dispone.
<b>Otras informaciones</b>	
<b>Densidad</b>	6.68 lb/gal
<b>Clase de inflamabilidad</b>	Inflamable IA estimado
<b>Porcentaje de volátiles</b>	79.7 %w/w
<b>Gravedad específica</b>	0.8

VOC (% en peso) 338.26 g/l Material  
545.04 g/l Revestimiento

## 10. Estabilidad y reactividad

<b>Reactividad</b>	El producto es estable y no es reactivo en condiciones normales de uso, almacenamiento y transporte.
<b>Estabilidad química</b>	El material es estable bajo condiciones normales.
<b>Posibilidad de reacciones peligrosas</b>	Ninguno bajo el uso normal.
<b>Condiciones que deben evitarse</b>	Evitar temperaturas superiores al punto de inflamación. Contacto con materias incompatibles.
<b>Materiales incompatibles</b>	Ácidos fuertes. Agentes oxidantes fuertes. Nitratos. halógenos flúor cloro
<b>Productos de descomposición peligrosos</b>	No se conocen productos de descomposición peligrosos.

## 11. Información toxicológica

### Información sobre las posibles vías de exposición

<b>Inhalación</b>	Puede provocar daños en los órganos tras exposiciones prolongadas o repetidas si se inhala. Puede provocar somnolencia y vértigo. Dolor de cabeza. Náusea, vómitos. La inhalación prolongada puede resultar nociva.
<b>Contacto con la cutánea</b>	Nocivo en contacto con la piel. Provoca irritación cutánea.
<b>Contacto con los ocular</b>	Provoca irritación ocular grave.
<b>Ingestión</b>	Nocivo en caso de ingestión.
<b>Síntomas relacionados a las características físicas, químicas y toxicológicas</b>	Dolor de cabeza. Puede provocar somnolencia y vértigo. Náusea, vómitos. Grave irritación de los ojos. Los síntomas pueden incluir escozor, lagrimeo, enrojecimiento, hinchazón y visión borrosa. Irritación de la piel. Puede causar enrojecimiento y dolor.

### Información sobre los efectos toxicológicos

<b>Toxicidad aguda</b>	Nocivo en contacto con la piel. Nocivo en caso de ingestión. Efectos narcóticos.
<b>Corrosión/irritación cutáneas</b>	Provoca irritación cutánea.
<b>Lesiones oculares graves/irritación ocular</b>	Provoca irritación ocular grave.
<b>Sensibilidad respiratoria o cutánea</b>	
<b>Sensibilización respiratoria</b>	No es un sensibilizante respiratorio.
<b>Sensibilización cutánea</b>	No se espera que este producto cause sensibilización cutánea.
<b>Mutagenicidad en células germinales</b>	No hay datos disponibles que indiquen que el producto o cualquier compuesto presente en una cantidad superior al 0.1% sea mutagénico o genotóxico.
<b>Carcinogenicidad</b>	Susceptible de provocar cáncer.

### Monografías del IARC. Evaluación general de la carcinogenicidad

DIÓXIDO DE TITANIO (CAS 13463-67-7)	2B Posiblemente carcinógeno para los seres humanos.
ETIL-BENCENO (CAS 100-41-4)	2B Posiblemente carcinógeno para los seres humanos.
NEGRO DE HUMO (CAS 1333-86-4)	2B Posiblemente carcinógeno para los seres humanos.
TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)	2B Posiblemente carcinógeno para los seres humanos. 3 No está clasificado en cuanto a la carcinogenicidad en seres humanos.
TOLUENO (CAS 108-88-3)	3 No está clasificado en cuanto a la carcinogenicidad en seres humanos.
XILENO (CAS 1330-20-7)	3 No está clasificado en cuanto a la carcinogenicidad en seres humanos.

### OSHA Sustancias específicas reguladas (29 CFR 1910.1001-1050)

No listado.

### Programa Nacional de Toxicología de EUA (NTP). Reporte sobre carcinógenos

No se dispone.

<b>Toxicidad para la reproducción</b>	Se ha demostrado que los componentes de este producto causan defectos de nacimiento y trastornos reproductivos en animales de laboratorio. Susceptible de perjudicar la fertilidad. Susceptible de dañar al feto.
---------------------------------------	---

**Toxicidad sistémica específica de órganos diana - Exposición única** Puede provocar somnolencia y vértigo.

**Toxicidad sistémica específica de órganos diana - Exposiciones repetidas** Provoca daños en los órganos tras exposiciones prolongadas o repetidas.

**Peligro por aspiración** No representa un peligro de aspiración.

**Efectos crónicos** Provoca daños en los órganos tras exposiciones prolongadas o repetidas. La inhalación prolongada puede resultar nociva. Una exposición prolongada puede producir efectos crónicos.

## 12. Información ecotoxicológica

**Ecotoxicidad** Tóxico para los organismos acuáticos, con efectos nocivos duraderos.

Componentes	Especies	Resultados de la prueba	
<b>ACETONA (CAS 67-64-1)</b>			
<b>Acuático/ a</b>			
Crustáceos	EC50	Pulga de agua (Daphnia magna)	10294 - 17704 mg/l, 48 horas
Pez	LC50	Trucha arco iris, trucha Donaldson (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 horas
<b>DIÓXIDO DE TITANIO (CAS 13463-67-7)</b>			
<b>Acuático/ a</b>			
Crustáceos	EC50	Pulga de agua (Daphnia magna)	> 1000 mg/l, 48 horas
Pez	LC50	Fúndulo o mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 horas
<b>ETIL-BENCENO (CAS 100-41-4)</b>			
<b>Acuático/ a</b>			
Crustáceos	EC50	Pulga de agua (Daphnia magna)	1.37 - 4.4 mg/l, 48 horas
Pez	LC50	Agalla azul (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 horas
		Piscardo de cabeza gorda (Pimephales promelas)	11.5 - 12.7 mg/l, 96 horas
<b>n-butyl alcohol (CAS 71-36-3)</b>			
<b>Acuático/ a</b>			
Crustáceos	EC50	Pulga de agua (Daphnia magna)	1897 - 2072 mg/l, 48 horas
Pez	LC50	Agalla azul (Lepomis macrochirus)	100 - 500 mg/l, 96 horas
<b>ÓXIDO DE ZINC (CAS 1314-13-2)</b>			
<b>Acuático/ a</b>			
Pez	LC50	Piscardo de cabeza gorda (Pimephales promelas)	2246 mg/l, 96 horas
<b>TOLUENO (CAS 108-88-3)</b>			
<b>Acuático/ a</b>			
Crustáceos	EC50	Pulga de agua (Daphnia magna)	19.6 mg/l, 48 horas
Pez	LC50	Trucha arco iris, trucha Donaldson (Oncorhynchus mykiss)	14.1 - 17.16 mg/l, 96 horas
<b>XILENO (CAS 1330-20-7)</b>			
<b>Acuático/ a</b>			
Pez	LC50	Agalla azul (Lepomis macrochirus)	10.464 - 16.114 mg/l, 96 horas
			7.711 - 9.591 mg/l, 96 horas
<b>ZINC PHOSPHATE (CAS 7779-90-0)</b>			
<b>Acuático/ a</b>			
Pez	LC50	Trucha arco iris, trucha Donaldson (Oncorhynchus mykiss)	0.09 mg/l, 96 horas

\* Los estimados para el producto pueden basarse en los datos para componentes adicionales que no se muestran.

**Persistencia y degradabilidad** No existen datos sobre la degradabilidad del producto.

### Potencial de bioacumulación

Nombre del material: CHARCOAL 325020 FLASHING PAINT  
325020 Versión #: 02 Fecha de expedición: 12-junio-2016 La fecha de emisión: 07-junio-2016

SDS US  
8 / 13



### Potencial de bioacumulación

<b>Coefficiente de reparto octanol/agua log Kow</b>	
ACETONA	-0.24
BUTANO	2.89
ETIL-BENCENO	3.15
n-butil alcohol	0.88
propano	2.36
TOLUENO	2.73
XILENO	3.12 - 3.2

**Movilidad en el suelo** No hay datos disponibles.

**Otros efectos adversos** No se esperan otros efectos adversos para el medio ambiente (p. ej. agotamiento del ozono, posible generación fotoquímica de ozono, perturbación endocrina, potencial para el calentamiento global) debido a este componente.

### 13. Información relativa a la eliminación de los productos

<b>Instrucciones para la eliminación</b>	Recoger y recuperar o botar en recipientes sellados en un vertedero oficial. Contenido bajo presión. No punzar, incinerar ni aplastar. No deje que el material entre en el drenaje o en el suministro de agua. No contamine los estanques, ríos o acequias con producto químico ni envases usados. Eliminar el contenido/ recipiente conforme a las reglamentaciones local/regional/nacional/internacional.
<b>Reglamentos locales sobre la eliminación</b>	Elimine de acuerdo con todas las regulaciones aplicables.
<b>Código de residuo peligroso</b>	El Código de Residuo debe ser asignado después de hablar con el usuario, el productor y la compañía de eliminación de residuos.
<b>Desechos/Producto no Utilizado</b>	Elimine observando las normas locales en vigor. Los recipientes vacíos o los revestimientos pueden retener residuos del producto. Este material y sus recipientes deben eliminarse de forma segura (véase: Instrucciones para la eliminación).
<b>Envases contaminados</b>	Ya que los recipientes vacíos pueden contener restos de producto, obsérvense las advertencias indicadas en la etiqueta después de vaciarse el recipiente. Los contenedores vacíos deben ser llevados a un sitio de manejo aprobado para desechos, para el reciclado o eliminación. No reutilice los recipientes vacíos.

### 14. Información relativa al transporte

#### DOT

<b>Número ONU</b>	No se dispone.
<b>Designación oficial de transporte de las Naciones Unidas</b>	Bien de consumo
<b>Clase(s) relativas al transporte</b>	
<b>Class</b>	ORM-D
<b>Riesgo secundario</b>	-
<b>Label(s)</b>	Ninguno
<b>Grupo de embalaje/envase, cuando aplique</b>	No aplicable.
<b>Precauciones especiales para el usuario</b>	Lea las instrucciones de seguridad, la HDS y los procedimientos de emergencia antes de manejar el producto.
<b>Disposiciones especiales</b>	Cantidad limitada
<b>Excepciones de embalaje</b>	156, 306
<b>Embalaje no a granel</b>	156, 306
<b>Embalaje a granel</b>	Ninguno

#### IATA

<b>UN number</b>	ID8000
<b>UN proper shipping name</b>	Consumer commodity
<b>Transport hazard class(es)</b>	
<b>Class</b>	9
<b>Subsidiary risk</b>	ORM-D
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed.

Cargo aircraft only	Allowed.
<b>IMDG</b>	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transporte a granel con arreglo al anexo II de MARPOL 73/789 y al Código IBC10	No establecido.

IMDG



## 15. Información reguladora

**Reglamentos federales de EE.UU.** Este producto es calificado como "químicamente peligroso" según el Estándar de Comunicación de Riesgos de la OSHA Hazard Communication Standard, 29 CFR 1910.1200. Uno o varios componentes no están listados por TSCA.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpart D) (Notificación de exportación)

No regulado.

### Lista de sustancias peligrosas de CERCLA (40 CFR 302.4)

ACETONA (CAS 67-64-1)	listado.
BUTANO (CAS 106-97-8)	listado.
ETIL-BENCENO (CAS 100-41-4)	listado.
n-butyl alcohol (CAS 71-36-3)	listado.
ÓXIDO DE ZINC (CAS 1314-13-2)	listado.
propano (CAS 74-98-6)	listado.
TOLUENO (CAS 108-88-3)	listado.
XILENO (CAS 1330-20-7)	listado.
ZINC PHOSPHATE (CAS 7779-90-0)	listado.

### SARA Sección 304 Notificación de emergencia sobre la liberación de sustancias

No regulado.

### OSHA Sustancias específicas reguladas (29 CFR 1910.1001-1050)

No listado.

### Ley de Enmiendas y Reautorización del Superfondo de 1986 (SARA)

<b>Categorías de peligro</b>	Peligro inmediato - Si
	Peligro Retrasado: - Si
	Riesgo de Ignición - Si
	Peligro de presión - no
	Riesgo de Reactividad - no

### SARA 302 Sustancia extremadamente peligrosa

No listado.

**SARA 311/312 Sustancias químicas peligrosas** no

**SARA 313 (Reporte TRI, acerca del Inventario de liberación de sustancias tóxicas)**

Nombre químico	Número CAS	% en peso
ETIL-BENCENO	100-41-4	<10
n-butil alcohol	71-36-3	<10
TOLUENO	108-88-3	<10
XILENO	1330-20-7	<10
ÓXIDO DE ZINC	1314-13-2	<1
ZINC PHOSPHATE	7779-90-0	<1

**Otras disposiciones federales****Ley de Aire Limpio (CAA), sección 112, lista de contaminantes peligrosos del aire (CPA)**

ETIL-BENCENO (CAS 100-41-4)  
TOLUENO (CAS 108-88-3)  
XILENO (CAS 1330-20-7)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) (Ley de aire limpio, Prevención de liberación accidental)**

BUTANO (CAS 106-97-8)  
propano (CAS 74-98-6)

**Ley de Agua Potable Segura (SDWA, siglas en inglés)** No regulado.

**Administración de Control de Drogas de EEUU (DEA). Lista 2, Químicos esenciales (21 CFR 1310.02(b) y 1310.04(f)(2) y Número de Código Químico**

ACETONA (CAS 67-64-1) 6532  
TOLUENO (CAS 108-88-3) 6594

**Administración para el Control de Drogas (DEA). Lista 1 y 2, Mezclas exentas (21 CFR 1310.12(c))**

ACETONA (CAS 67-64-1) 35 %WV  
TOLUENO (CAS 108-88-3) 35 %WV

**DEA – Código de la mezcla exenta**

ACETONA (CAS 67-64-1) 6532  
TOLUENO (CAS 108-88-3) 594

**Regulaciones de un estado de EUA****US - California Candidate Chemicals: Listado**

ACETONA (CAS 67-64-1)  
BUTANO (CAS 106-97-8)  
DIÓXIDO DE TITANIO (CAS 13463-67-7)  
NEGRO DE HUMO (CAS 1333-86-4)  
TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)

**US - California Candidate Chemicals: Listed on initial list**

ETIL-BENCENO (CAS 100-41-4)  
TOLUENO (CAS 108-88-3)  
XILENO (CAS 1330-20-7)

**Sustancias Controladas de California; EUA. Departamento de Justicia, CA (Salud y Seguridad de California, Código de Sección 11100)**

No listado.

**Derecho a la información de Massachusetts – Lista de sustancias**

ACETONA (CAS 67-64-1)  
BUTANO (CAS 106-97-8)  
DIÓXIDO DE TITANIO (CAS 13463-67-7)  
ETIL-BENCENO (CAS 100-41-4)  
n-butil alcohol (CAS 71-36-3)  
NEGRO DE HUMO (CAS 1333-86-4)  
ÓXIDO DE ZINC (CAS 1314-13-2)  
propano (CAS 74-98-6)  
TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)  
TOLUENO (CAS 108-88-3)  
XILENO (CAS 1330-20-7)

**Ley del derecho a la información de los trabajadores y la comunidad de Nueva Jersey, EUA**

ACETONA (CAS 67-64-1)  
BUTANO (CAS 106-97-8)  
DIÓXIDO DE TITANIO (CAS 13463-67-7)  
ETIL-BENCENO (CAS 100-41-4)

n-butyl alcohol (CAS 71-36-3)  
 NEGRO DE HUMO (CAS 1333-86-4)  
 ÓXIDO DE ZINC (CAS 1314-13-2)  
 propano (CAS 74-98-6)  
 TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)  
 TOLUENO (CAS 108-88-3)  
 XILENO (CAS 1330-20-7)  
 ZINC PHOSPHATE (CAS 7779-90-0)

**US. Ley del Derecho a la Información de los Trabajadores y la Comunidad de Pennsylvania**

ACETONA (CAS 67-64-1)  
 BUTANO (CAS 106-97-8)  
 DIÓXIDO DE TITANIO (CAS 13463-67-7)  
 ETIL-BENCENO (CAS 100-41-4)  
 n-butyl alcohol (CAS 71-36-3)  
 NEGRO DE HUMO (CAS 1333-86-4)  
 ÓXIDO DE ZINC (CAS 1314-13-2)  
 propano (CAS 74-98-6)  
 TALCO (SIN FIBRAS DE ASBESTO) (CAS 14807-96-6)  
 TOLUENO (CAS 108-88-3)  
 XILENO (CAS 1330-20-7)

**Derecho a la información de Rhode Island, EUA**

ACETONA (CAS 67-64-1)  
 BUTANO (CAS 106-97-8)  
 ETIL-BENCENO (CAS 100-41-4)  
 n-butyl alcohol (CAS 71-36-3)  
 ÓXIDO DE ZINC (CAS 1314-13-2)  
 propano (CAS 74-98-6)  
 TOLUENO (CAS 108-88-3)  
 XILENO (CAS 1330-20-7)  
 ZINC PHOSPHATE (CAS 7779-90-0)

**Proposición 65 del Estado de California, EUA**

ADVERTENCIA: Este producto contiene un componente químico que en el Estado de California se conoce como una causa de cáncer y defectos de nacimiento u otros daños reproductivos.

**California, EUA - Proposición 65 - CRT: Fecha de inclusión en lista/ Sustancia carcinogénica**

Benceno (CAS 71-43-2)	Listado: 27 de febrero de 1987
CRYSTALLINE QUARTZ SILICA (CAS 14808-60-7)	Listado: 1 de octubre de 1988
DIÓXIDO DE TITANIO (CAS 13463-67-7)	Incluido en listado: 3 de septiembre 2011
ETIL-BENCENO (CAS 100-41-4)	Listado: June 11, 2004
FORMALDEHIDO (CAS 50-00-0)	Listado: 01 de enero de 1988
NEGRO DE HUMO (CAS 1333-86-4)	Listado: 21 de febrero 2003

**EE.UU. - Proposición 65 de California - CTR: Fecha de listado/Tóxico para el desarrollo**

Benceno (CAS 71-43-2)	Listado: 26 de diciembre de 1997
TOLUENO (CAS 108-88-3)	Listado: 1 de enero de 1991

**EE.UU. - Proposición 65 de California - CTR: Fecha de listado/Tóxico para el sistema reproductor femenino**

TOLUENO (CAS 108-88-3)	Listado: 7 de agosto de 2009
------------------------	------------------------------

**EE.UU. - Proposición 65 de California - CTR: Fecha de listado/Tóxico para el sistema reproductor masculino**

Benceno (CAS 71-43-2)	Listado: 26 de diciembre de 1997
-----------------------	----------------------------------

**Inventarios Internacionales**

<b>País(es) o región</b>	<b>Nombre del inventario</b>	<b>Listado (si/no)*</b>
Australia	Inventario de Sustancias Químicas de Australia (AICS)	no
Canadá	Lista de Sustancias Nacionales (DSL)	no
Canadá	Lista de Sustancias No Nacionales (NDSL)	no
China	Inventario de sustancias químicas existentes en China (Inventory of Existing Chemical Substances in China)	no
Europa	Inventario Europeo de Sustancias Químicas Comerciales (EINECS)	no
Europa	Lista europea de sustancias químicas notificadas (ELINCS)	no
Japón	Inventario de sustancias químicas nuevas y existentes (Inventory of Existing and New Chemical Substances, ENCS)	no

<b>País(es) o región</b>	<b>Nombre del inventario</b>	<b>Listado (si/no)*</b>
Corea	Lista de sustancias químicas existentes (Existing Chemicals List, ECL)	no
Nueva Zelanda	Inventario de Nueva Zelanda	no
Filipinas	Inventario de Sustancias Químicas de Filipinas (PICCS)	no
Estados Unidos y Puerto Rico	Inventario de la Ley del Control de Sustancias Tóxicas (en inglés, TSCA)	no

\*Un "Sí" indica que todos los componentes de este producto cumplen con los requisitos del inventario administrado por el(los) país(es) responsable(s)

Un "No" indica que uno o más componentes del producto no están listados o están exentos de los requisitos del inventario administrado por el(los) país(es) responsable(s).

## 16. Otras informaciones, incluida información sobre la fecha de preparación o última revisión de la HDS

<b>La fecha de emisión</b>	07-junio-2016
<b>La fecha de revisión</b>	12-junio-2016
<b>Versión #</b>	02
<b>categoría HMIS®</b>	Salud: 2* Inflamabilidad: 4 Factor de riesgo físico: 0
<b>Clasificación según NFPA</b>	Salud: 2 Inflamabilidad: 4 Inestabilidad: 0

**Clasificación según NFPA**



**Cláusula de exención de responsabilidad**

La información y recomendaciones de esta ficha de datos de seguridad, según nuestro leal saber y entender, es exacta a la fecha de su elaboración. Ningún enunciado planteado aquí debe considerarse como base de ninguna garantía, expresa o implícita. Es responsabilidad del usuario determinar la aplicabilidad de esta información y la idoneidad de este material o producto para sus propósitos particulares.



# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/26/2015

Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Tropical - #216 Modified Bitumen Adhesive  
 Product code : TRO-216  
 Formula : 700-TRO-216

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Roofing/Waterproofing

#### 1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS  
 1904 S.W. 31ST Ave.  
 HALLANDALE, FL 33009 - UNITED STATES  
 T 954-983-3434  
[technical@tropicalroofingproducts.com](mailto:technical@tropicalroofingproducts.com) - [www.tropicalroofingproducts.com](http://www.tropicalroofingproducts.com)

#### 1.4. Emergency telephone number

Emergency number : 800-424-9300  
 Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. 2	H225
Muta. 1B	H340
Carc. 1B	H350
STOT RE 1	H372

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

0

##### Hazard pictograms (GHS-US)



GHS02

GHS08

##### Signal word (GHS-US)

: Danger

##### Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapour  
 H340 - May cause genetic defects (Dermal, Inhalation)  
 H350 - May cause cancer (Inhalation, Dermal)  
 H372 - Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation)

##### Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P210 - Keep away from open flames. - 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 fume, gas, vapours  
 P264 - Wash hands thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves, protective clothing  
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 P308+P313 - If exposed or concerned: Get medical advice/attention

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P314 - Get medical advice/attention if you feel unwell  
P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), foam, dry extinguishing powder to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
asphaltic bitumen, not cut back	(CAS No) 8052-42-4	60 - 80	Not classified
kaolin	(CAS No) 1332-58-7	15 - 30	Not classified
Stoddard solvent	(CAS No) 8052-41-3	20 - 25	Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304
attapulgit	(CAS No) 12174-11-7	5 - 10	Carc. 2, H351
cellulose	(CAS No) 9004-34-6	3 - 7	Not classified
SBR-latex	(CAS No) 9003-55-8		Not classified

Full text of H-phrases: see section 16 \*The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : There are potential chronic health effects to consider.

Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.

Symptoms/injuries after skin contact : May cause an allergic skin reaction. May cause moderate irritation.

Symptoms/injuries after eye contact : Eye irritation.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

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

Fire hazard : Combustible liquid.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form flammable/explosive vapour-air mixture.

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reactivity : Upon combustion: CO and CO<sub>2</sub> are formed.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Absorb spillage to prevent material damage. Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition. Remove ignition sources.

#### 6.1.1. For non-emergency personnel

Protective equipment : Protective clothing. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Do not breathe fume, spray, vapours.

Handling temperature : < 110 (≤ 100) °F

Hygiene measures : Do not eat, drink or smoke when using this product. Wash Always wash hands after handling the product, Do not eat, drink or smoke when using this product, Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

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

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition.

Storage temperature : < 43 °C

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: ignition sources.

Prohibitions on mixed storage : No data available.

Storage area : Meet the legal requirements.

Special rules on packaging : Keep only in original container. meet the legal requirements. Store in a closed container. correctly labelled.

Packaging materials : No data available.

### 7.3. Specific end use(s)

No additional information available



# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Tropical - #216 Modified Bitumen Adhesive	
ACGIH	Not applicable
OSHA	Not applicable
asphaltic bitumen, not cut back (8052-42-4)	
OSHA	Not applicable
attapulgite (12174-11-7)	
ACGIH	Not applicable
OSHA	Not applicable
cellulose (9004-34-6)	
OSHA	Not applicable
kaolin (1332-58-7)	
OSHA	Not applicable
SBR-latex (9003-55-8)	
ACGIH	Not applicable
OSHA	Not applicable

#### 8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: PICM010.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: BLACK FIBERED MASTIC.
Colour	: Black
Odour	: Petroleum-like odour
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 300 (≤ 450) °F
Flash point	: 106 °F
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0.293 kPa at 20 °C
Relative vapour density at 20 °C	: No data available
Relative density	: 1.02 - 1.12
Density	: 8 - 9
Percent Solids	: > 75 %

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility	: Water: 0 % Acetone: ≈ g/100ml Organic solvent: ≈ 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available

### 9.2. Other information

VOC content : < 250 (≤ 250) g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed.

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified  
(Lack of data)

asphaltic bitumen, not cut back (8052-42-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

cellulose (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6 mg/l/4h (Rat)

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : May cause genetic defects (Dermal, Inhalation).  
Carcinogenicity : May cause cancer (Inhalation, Dermal).

asphaltic bitumen, not cut back (8052-42-4)	
IARC group	3 - Not classifiable

attapulgite (12174-11-7)	
IARC group	2B - Possibly carcinogenic to humans, 3 - Not classifiable

SBR-latex (9003-55-8)	
IARC group	3 - Not classifiable

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact	: Eye irritation.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
<b>cellulose (9004-34-6)</b>	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

#### 12.2. Persistence and degradability

<b>Tropical - #216 Modified Bitumen Adhesive</b>	
Persistence and degradability	Not established.
<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>attapulgit (12174-11-7)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>cellulose (9004-34-6)</b>	
Persistence and degradability	Biodegradable in water.
<b>kaolin (1332-58-7)</b>	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>SBR-latex (9003-55-8)</b>	
Persistence and degradability	Biodegradability in water: no data available.

#### 12.3. Bioaccumulative potential

<b>Tropical - #216 Modified Bitumen Adhesive</b>	
Bioaccumulative potential	Not established.

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
Log Pow	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.
<b>attapulgite (12174-11-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>cellulose (9004-34-6)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>kaolin (1332-58-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>Stoddard solvent (8052-41-3)</b>	
Log Pow	3.16-7.06
<b>SBR-latex (9003-55-8)</b>	
Bioaccumulative potential	No bioaccumulation data available.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

- Effect on ozone layer :  
Effect on the global warming : No known ecological damage caused by this product.  
Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.  
Additional information : Industrial waste.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

- In accordance with DOT  
Transport document description : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated, III  
UN-No.(DOT) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated  
Packing group (DOT) : III - Minor Danger

### Additional information

- Other information : No supplementary information available.

### ADR

- No additional information available  
Transport by sea  
No additional information available  
Air transport  
No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>Tropical - #216 Modified Bitumen Adhesive</b>	
Not listed on the United States SARA Section 313	
<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>attapulgite (12174-11-7)</b>
Not listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>cellulose (9004-34-6)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>kaolin (1332-58-7)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Stoddard solvent (8052-41-3)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### 15.2.2. National regulations

### 15.3. US State regulations

<b>Tropical - #216 Modified Bitumen Adhesive()</b>	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

<b>attapulgite (12174-11-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

<b>asphaltic bitumen, not cut back (8052-42-4)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List

<b>cellulose (9004-34-6)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List

<b>kaolin (1332-58-7)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List

<b>Stoddard solvent (8052-41-3)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : None.

# Tropical - #216 Modified Bitumen Adhesive

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 1B	Germ cell mutagenicity, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure

### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 2 Moderate Hazard  
Physical : 0 Minimal Hazard  
Personal Protection : P

### ZLF-PMS 364 CUSTOM TEMPLATE

*All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.*



## #216 MODIFIED BITUMEN ADHESIVE

**TROPICAL ROOFING PRODUCTS' #216 MODIFIED BITUMEN ADHESIVE** is a professional grade cold applied, superior bonding strength polymer modified asphalt adhesive that provides excellent adhesion and elongation properties with unsurpassed resiliency and durability. Ideal for applying SBS modified bitumen sheets, applying glass base ply's, as a lap cement, or as an extremely high quality roof adhesive. Meets and exceeds all the requirements of ASTM D 3019, Type-1 and Miami-Dade NOA.

**PREPARATION:** All surfaces must be clean, dry, smooth, even, and free from all other foreign matter. Raised edges, buckles, and blisters should be cut and flattened. Check flashings, drains, edgings, vents, and valleys and repair as needed.

**APPLICATION:** Apply to clean dry surface using stiff, bristle brush, roller or spray equipment. For best results, weather should be at least 65°F, dry and clear, with no threat of rain for 48 hours. Do not thin. Roofing may be placed up to 1 hour after cement is applied, as #216 will remain tacky for approximately one hour after application. Allow open time to permit some solvent evaporation. Sheets should be fully adhered in position before adhesive sets. Drying time for between-layer application is approximately 48 hours in warm, dry weather.

**COVERAGE:** This adhesive is applied uniformly between layers of roofing at the rate of 1 to 1 1/2 gallons per 100 sq. ft. depending on surface porosity. For spot application of the first layer to smooth, non-nailable surfaces, use 1-2 gallons per 100-sq. ft. Stir adhesive to uniform consistency before using. Avoid heavy mounds of mass accumulation.

**PRECAUTIONS: DO NOT ALLOW TO FREEZE. DO NOT THIN. DO NOT HEAT CONTAINER** or store at temperatures greater than 120°F. Be sure lid is tight and pail is secure when transporting this product. Do not allow pail to tumble as this may loosen the lid and allow leakage or spillage to occur.

**ADDITIONAL INFORMATION TO REROOF OVER AN EXISTING GRAVEL SURFACE:** Start by removing all loose gravel and debris by sweeping with a stiff broom, or use special vacuum equipment. All remaining gravel, sharp edges and lumps of old roofing material must be scraped away to provide a smooth, even surface to receive the buffer layer without puncturing it. The buffer layer is 80 lb. mineral-surfaced cap sheet applied mineral face down with 2" side laps and 6" end laps. It replaces the first layer of base sheet.

Contains petroleum distillate. Keep away from heat and flame. **USE ONLY WITH ADEQUATE VENTILATION!** Avoid contact with skin and breathing of vapor. **CLOSE AIR INTAKES** on roof until solvents dissipate. **KEEP OUT OF REACH OF CHILDREN.** Close container after each use. **DO NOT TAKE INTERNALLY!** If swallowed, do not induce vomiting. **CALL PHYSICIAN IMMEDIATELY!** Contains volatile solvents that might contaminate potable water.

MAXIMUM V.O.C = 250 G/L  
CONSISTENCY — MEDIUM- BODIED LIQUID  
WEIGHT — 7.7 LBS. PER GAL  
FLASH POINT (T.C.C.) — 107°F  
VISCOSITY, STORMER — 130 +/- 10

ASTM D 3019



FLORIDA  
1904 SW 31ST AVE  
HALLANDALE, FL 33009  
800.432.2855

CALIFORNIA  
14435 MACAW STREET  
LA MIRADA, CA 90638  
877.827.2622

TEXAS  
1225 BRAI DRIVE  
PORT ARTHUR, TX 77640  
866.727.0091



# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/18/2015 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Tropical - #104 Asphalt Concrete Primer  
 Product code : TRO-104  
 Formula : 700-TRO-104

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Roofing/Waterproofing

#### 1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS  
 1904 S.W. 31ST Ave.  
 HALLANDALE, FL 33009 - UNITED STATES  
 T 954-983-3434  
[technical@tropicalroofingproducts.com](mailto:technical@tropicalroofingproducts.com) - [www.tropicalroofingproducts.com](http://www.tropicalroofingproducts.com)

#### 1.4. Emergency telephone number

Emergency number : 800-424-9300  
 Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. 2	H225
Muta. 1B	H340
Carc. 1B	H350
STOT RE 1	H372

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

0

##### Hazard pictograms (GHS-US)



GHS02

GHS08

##### Signal word (GHS-US)

: Danger

##### Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapour  
 H340 - May cause genetic defects (Dermal, Inhalation)  
 H350 - May cause cancer (Inhalation, Dermal)  
 H372 - Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation)

##### Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P210 - Keep away from open flames. - 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 fume, gas, vapours  
 P264 - Wash hands thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves, protective clothing  
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 P308+P313 - If exposed or concerned: Get medical advice/attention



# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P314 - Get medical advice/attention if you feel unwell  
P370+P378 - In case of fire: Use carbon dioxide (CO<sub>2</sub>), foam, dry extinguishing powder to extinguish  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
asphaltic bitumen, not cut back	(CAS No) 8052-42-4	60 - 80	Not classified
kaolin	(CAS No) 1332-58-7	15 - 30	Not classified
Stoddard solvent	(CAS No) 8052-41-3	20 - 25	Muta. 1B, H340 Carc. 1B, H350 STOT RE 1, H372 Asp. Tox. 1, H304
attapulgit	(CAS No) 12174-11-7	5 - 10	Carc. 2, H351
cellulose	(CAS No) 9004-34-6	3 - 7	Not classified

Full text of H-phrases: see section 16 \*The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).  
First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.  
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.  
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.  
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : There are potential chronic health effects to consider.  
Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.  
Symptoms/injuries after skin contact : May cause an allergic skin reaction. May cause moderate irritation.  
Symptoms/injuries after eye contact : Eye irritation.  
Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

Fire hazard : Combustible liquid.  
Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. May form flammable/explosive vapour-air mixture.  
Reactivity : Upon combustion: CO and CO<sub>2</sub> are formed.

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Absorb spillage to prevent material damage. Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition. Remove ignition sources.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Protective clothing. Gloves.
- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- For containment : Collect spillage.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Do not breathe fume, spray, vapours.
- Handling temperature : < 110 (≤ 100) °F
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash Always wash hands after handling the product, Do not eat, drink or smoke when using this product, Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

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

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep container closed when not in use.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition.
- Storage temperature : < 43 °C
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: ignition sources.
- Prohibitions on mixed storage : No data available.
- Storage area : Meet the legal requirements.
- Special rules on packaging : Keep only in original container. meet the legal requirements. Store in a closed container. correctly labelled.
- Packaging materials : No data available.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Tropical - #104 Asphalt Concrete Primer	
ACGIH	Not applicable

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>Tropical - #104 Asphalt Concrete Primer</b>	
OSHA	Not applicable
<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
OSHA	Not applicable
<b>attapulgite (12174-11-7)</b>	
ACGIH	Not applicable
OSHA	Not applicable
<b>cellulose (9004-34-6)</b>	
OSHA	Not applicable
<b>kaolin (1332-58-7)</b>	
OSHA	Not applicable

### 8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: PICM010.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: BLACK FIBERED MASTIC.
Colour	: Black
Odour	: Petroleum-like odour
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 300 (≤ 450) °F
Flash point	: 106 °F
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: 0.293 kPa at 20 °C
Relative vapour density at 20 °C	: No data available
Relative density	: 1.02 - 1.12
Density	: 8 - 9
Percent Solids	: > 75 %
Solubility	: Water: 0 % Acetone: ≈ g/100ml Organic solvent:≈ 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Explosive properties : No data available.  
Oxidising properties : No data available.  
Explosive limits : No data available

### 9.2. Other information

VOC content : < 250 (≤ 250) g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed.

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified  
(Lack of data)

asphaltic bitumen, not cut back (8052-42-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
cellulose (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6 mg/l/4h (Rat)

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : May cause genetic defects (Dermal, Inhalation).  
Carcinogenicity : May cause cancer (Inhalation, Dermal).

asphaltic bitumen, not cut back (8052-42-4)	
IARC group	3 - Not classifiable
attapulgite (12174-11-7)	
IARC group	2B - Possibly carcinogenic to humans, 3 - Not classifiable

Reproductive toxicity : Not classified  
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation).

Aspiration hazard : Not classified  
Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact	: Eye irritation.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
<b>cellulose (9004-34-6)</b>	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

#### 12.2. Persistence and degradability

<b>Tropical - #104 Asphalt Concrete Primer</b>	
Persistence and degradability	Not established.
<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>attapulgite (12174-11-7)</b>	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>cellulose (9004-34-6)</b>	
Persistence and degradability	Biodegradable in water.
<b>kaolin (1332-58-7)</b>	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. Bioaccumulative potential

<b>Tropical - #104 Asphalt Concrete Primer</b>	
Bioaccumulative potential	Not established.
<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
Log Pow	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.
<b>attapulgite (12174-11-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>cellulose (9004-34-6)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>kaolin (1332-58-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>Stoddard solvent (8052-41-3)</b>	
Log Pow	3.16-7.06

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.

Additional information : Industrial waste.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

Transport document description : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated, III

UN-No.(DOT) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

Packing group (DOT) : III - Minor Danger

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Tropical - #104 Asphalt Concrete Primer

Not listed on the United States SARA Section 313

#### asphaltic bitumen, not cut back (8052-42-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### attapulgite (12174-11-7)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### cellulose (9004-34-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### kaolin (1332-58-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Stoddard solvent (8052-41-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

05/18/2015

EN (English)

7/9

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

### 15.3. US State regulations

Tropical - #104 Asphalt Concrete Primer()	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

### attapulgit (12174-11-7)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

### asphaltic bitumen, not cut back (8052-42-4)

U.S. - New Jersey - Right to Know Hazardous Substance List

### cellulose (9004-34-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

### kaolin (1332-58-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

### Stoddard solvent (8052-41-3)

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : None.

Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 1B	Germ cell mutagenicity, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure

# Tropical - #104 Asphalt Concrete Primer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 2 Moderate Hazard  
Physical : 0 Minimal Hazard  
Personal Protection : p

### ZLF-PMS 364 CUSTOM TEMPLATE

*All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.*





## #104 ASPHALT CONCRETE PRIMER

**TROPICAL ROOFING PRODUCTS' #104 ASPHALT CONCRETE PRIMER** is a solvent-based bond coat and penetrating sealer for priming most surfaces prior to application of cold applied or hot mopped asphalt coatings, roof cements, adhesives, asphalt damp proofing and waterproofing. Not recommended as a stand-alone roof coating. Meets ASTM D 41, FED SPEC SS-A-701, Miami-Dade NOA.

**PREPARATION:** Surface must be clean and dry, free of moisture both on and beneath the surface. Scrape off gravel to provide a smooth surface. Sweep roof thoroughly to remove as much dust, dirt, and debris as possible. Use wire brush to remove rust and scale from metal.

**APPLICATION:** Apply a thin, single coat of #104 over the entire surface with a roller or heavy-duty spray equipment. Brush out any excess immediately after application. Avoid over-application and build-up of surface film. Allow to dry thoroughly before applying adhesives or coatings. Store primer in a warm room overnight before using in cold weather. Drying time varies with weather conditions.

**COVERAGE:** Proper application will cover approximately 100 square feet per gallon, depending on surface porosity.

**PRECAUTIONS: DO NOT ALLOW TO FREEZE. DO NOT THIN. DO NOT HEAT CONTAINER** or store at temperatures greater than 120°F. Be sure the lid is tight and the pail is secured when transporting this product. Do not allow pail to tumble as this may loosen the lid and allow leakage or spillage to occur. **DO NOT USE** with solvent sensitive insulation, wood shingles or wood flashings. This primer is not recommended over PVC sheet roofing, rubber, shingles of any kind, or old roofs that are too dry and brittle.

**CLEANUP:** Clean tools with mineral spirits or paint thinner.

Contains petroleum distillate. Keep away from heat and flame. **USE ONLY WITH ADEQUATE VENTILATION!** Avoid contact with skin and breathing of vapor. **CLOSE AIR INTAKES** on roof until solvents dissipate. **KEEP OUT OF REACH OF CHILDREN.** Close container after each use. **DO NOT TAKE INTERNALLY!** If swallowed, do not induce vomiting. **CALL PHYSICIAN IMMEDIATELY!** Contains volatile solvents that might contaminate potable water

MAXIMUM V.O.C = 350 G/L  
CONSISTENCY — BLACK LIQUID  
WEIGHT — 7.7+/- .2 LBS. PER GAL  
FLASH POINT (T.C.C.) — 105°F+  
SERVICE TEMPERATURE (RANGE) — 40°F-90°F  
DRYING TIME — AVERAGE: 3 HRS. TO TOUCH

ASTM D 41  
FED SPEC SS-A-701



FLORIDA  
1904 SW 31ST AVE  
HALLANDALE, FL 33009  
800.432.2855

CALIFORNIA  
14435 MACAW STREET  
LA MIRADA, CA 90638  
877.827.2622

TEXAS  
1225 BRAI DRIVE  
PORT ARTHUR, TX 77640  
866.727.9091



# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of issue: 05/18/2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch  
Product code : TRO-951  
Formula : 700-TRO-951

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Elastomeric Roof Coating

#### 1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS  
1904 S.W. 31ST Ave.  
HALLANDALE, FL 33009 - UNITED STATES  
T 954-983-3434  
[technical@tropicalroofingproducts.com](mailto:technical@tropicalroofingproducts.com) - [www.tropicalroofingproducts.com](http://www.tropicalroofingproducts.com)

#### 1.4. Emergency telephone number

Emergency number : 800-424-9300  
Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Corr. 1C H314  
Muta. 2 H341  
Aquatic Chronic 1 H410  
Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

0

##### Hazard pictograms (GHS-US)



##### Signal word (GHS-US)

: Warning

##### Hazard statements (GHS-US)

: H302 - Harmful if swallowed  
H317 - May cause an allergic skin reaction  
H320 - Causes eye irritation  
H413 - May cause long lasting harmful effects to aquatic life

##### Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P264 - Wash hands, forearms and face thoroughly after handling  
P273 - Avoid release to the environment  
P280 - Wear protective gloves, eye protection  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep 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  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P310 - Immediately call a doctor, a POISON CENTER  
P321 - Specific treatment (see eye protection, protective gloves, a POISON CENTER, a doctor on this label)  
P363 - Wash contaminated clothing before reuse

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P391 - Collect spillage  
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	22 - 32	Not classified
calcium carbonate	(CAS No) 471-34-1	24 - 32	Not classified
latex,liquid,synthetic		13 - 18	Not classified
titanium(IV) oxide	(CAS No) 13463-67-7	8 - 12	Carc. 2, H351
1,2-propanediol	(CAS No) 57-55-6	0.5 - 0.8	Not classified
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	(CAS No) 25265-77-4	0.3 - 0.6	Not classified
polyethylenes	(CAS No) 9002-88-4	0.3 - 0.6	Not classified
zinc oxide	(CAS No) 1314-13-2	0.2 - 0.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16 \*The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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

First-aid measures after inhalation : Allow victim to breathe fresh air.

First-aid measures after skin contact : Wash with water and soap. Rinse with water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist. Direct contact with the eyes is likely to be irritating.

First-aid measures after ingestion : Do not induce vomiting. Drink plenty of water. Rinse mouth. Get medical advice/attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after skin contact : May cause moderate irritation.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

Symptoms/injuries after ingestion : No data available.

Chronic symptoms : No effects known.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

No additional information available

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

Fire hazard : Non combustible. Not flammable.

Reactivity : No data available.

### 5.3. Advice for firefighters

Firefighting instructions : No specific fire-fighting instructions required.

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with eyes.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Wash Always wash hands after handling the product thoroughly after handling. Wash contaminated clothing before reuse.

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

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Storage temperature : 4 - 38 °C

Storage area : Keep only in the original container. Protect against frost.

Special rules on packaging : Keep only in original container. meet the legal requirements.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch	
ACGIH	Not applicable
OSHA	Not applicable
Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
titanium(IV) oxide (13463-67-7)	
OSHA	Not applicable
calcium carbonate (471-34-1)	
ACGIH	Not applicable
OSHA	Not applicable
zinc oxide (1314-13-2)	
OSHA	Not applicable

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

latex,liquid,synthetic	
ACGIH	Not applicable
OSHA	Not applicable
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)	
ACGIH	Not applicable
OSHA	Not applicable
1,2-propanediol (57-55-6)	
ACGIH	Not applicable
OSHA	Not applicable
polyethylenes (9002-88-4)	
OSHA	Not applicable

### 8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Face shield.
Skin and body protection	: Wear suitable protective clothing.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: < 0 °C
Boiling point	: > 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 10.8 - 11.4 lb/gal
Solubility	: Water: ≈ 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>titanium(IV) oxide (13463-67-7)</b>	
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value)
<b>calcium carbonate (471-34-1)</b>	
LD50 oral rat	6450 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Literature study; >2000 mg/kg; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	> 3 mg/l/4h (Rat; Experimental value)
ATE US (oral)	6450.000 mg/kg bodyweight
<b>zinc oxide (1314-13-2)</b>	
LD50 oral rat	> 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	> 5.7 mg/l/4h (Rat; Experimental value)
<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
LD50 oral rat	3200 mg/kg (Rat)
LD50 dermal rabbit	> 15200 mg/kg (Rabbit)
ATE US (oral)	3200.000 mg/kg bodyweight
<b>1,2-propanediol (57-55-6)</b>	
LD50 oral rat	20000 mg/kg (Rat; Experimental value)
LD50 dermal rat	22500 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	20800 mg/kg (Rabbit; Experimental value)
ATE US (oral)	20000.000 mg/kg bodyweight
ATE US (dermal)	20800.000 mg/kg bodyweight
<b>polyethylenes (9002-88-4)</b>	
LD50 oral rat	> 2000 mg/kg (Rat)
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Suspected of causing genetic defects (oral).

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Carcinogenicity : Not classified.

<b>titanium(IV) oxide (13463-67-7)</b>	
IARC group	2B - Possibly carcinogenic to humans

<b>polyethylenes (9002-88-4)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact : May cause moderate irritation.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

Symptoms/injuries after ingestion : No data available.

Chronic symptoms : No effects known.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

<b>titanium(IV) oxide (13463-67-7)</b>	
LC50 fish 1	> 1000 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	< 1000 mg/l (432 h; Daphnia magna; Static system)
LC50 fish 2	> 1 g/l (96 h; Leuciscus idus)
EC50 Daphnia 2	< 500 mg/l (720 h; Daphnia magna; Static system)
Threshold limit algae 1	61 mg/l (72 h; Pseudokirchneriella subcapitata)

<b>calcium carbonate (471-34-1)</b>	
LC50 fish 1	> 100 % (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 % (48 h; Daphnia magna)
TLM fish 1	> 56000 mg/l (96 h; Gambusia affinis)
Threshold limit algae 1	> 14 mg/l (72 h; Desmodesmus subspicatus; GLP)
Threshold limit algae 2	14 mg/l (72 h; Desmodesmus subspicatus; GLP)

<b>zinc oxide (1314-13-2)</b>	
LC50 fish 1	0.59 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Zinc ion)
EC50 Daphnia 1	0.068 mg/l (48 h; Daphnia magna; Zinc ion)
LC50 fish 2	0.14 mg/l (96 h; Oncorhynchus mykiss)
Threshold limit algae 1	0.136 mg/l (72 h; Pseudokirchneriella subcapitata; Zinc ion)
Threshold limit algae 2	< 0.12 mg/l (Algae; Zinc ion)

<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
LC50 fish 1	30 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	147.8 mg/l (48 h; Daphnia sp.)
Threshold limit algae 1	3.28 mg/l (72 h; Selenastrum capricornutum; Biomass)
Threshold limit algae 2	18.4 mg/l (72 h; Selenastrum capricornutum; Growth)

<b>1,2-propanediol (57-55-6)</b>	
LC50 fish 1	51400 mg/l (96 h; Pimephales promelas)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
EC50 Daphnia 1	34400 mg/l (48 h; Daphnia magna)
LC50 fish 2	51600 mg/l (96 h; Oncorhynchus mykiss)
TLM fish 1	> 1000 ppm (96 h; Pisces)

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>1,2-propanediol (57-55-6)</b>	
TLM other aquatic organisms 1	> 1000 ppm (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit algae 1	15000 mg/l (336 h; Selenastrum capricornutum)
Threshold limit algae 2	< 5300 mg/l (336 h; Skeletonema costatum)

### 12.2. Persistence and degradability

<b>Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch</b>	
Persistence and degradability	Not established.

<b>titanium(IV) oxide (13463-67-7)</b>	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>calcium carbonate (471-34-1)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil.
ThOD	Not applicable (inorganic)

<b>zinc oxide (1314-13-2)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>latex, liquid, synthetic</b>	
Persistence and degradability	Biodegradability in soil: no data available.
Biochemical oxygen demand (BOD)	0.01 g O <sub>2</sub> /g substance

<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.1 g O <sub>2</sub> /g substance
ThOD	2.4 g O <sub>2</sub> /g substance

<b>1,2-propanediol (57-55-6)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.96 - 1.08 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.63 g O <sub>2</sub> /g substance
ThOD	1.69 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.57 % ThOD

<b>polyethylenes (9002-88-4)</b>	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.

### 12.3. Bioaccumulative potential

<b>Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch</b>	
Bioaccumulative potential	Not established.

<b>titanium(IV) oxide (13463-67-7)</b>	
Bioaccumulative potential	Not bioaccumulative.

<b>calcium carbonate (471-34-1)</b>	
Log Pow	-2.12 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.



# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>zinc oxide (1314-13-2)</b>	
Log Pow	1.53 (Estimated value),
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>latex,liquid,synthetic</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
Log Pow	3.47 (Experimental value)
<b>1,2-propanediol (57-55-6)</b>	
Log Pow	-1.41 - -0.30
Bioaccumulative potential	Not bioaccumulative.
<b>polyethylenes (9002-88-4)</b>	
Bioaccumulative potential	No bioaccumulation data available.

### 12.4. Mobility in soil

<b>1,2-propanediol (57-55-6)</b>	
Surface tension	0.036 N/m (25 °C)

### 12.5. Other adverse effects

Effect on ozone layer	:
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Avoid release to the environment, Do not discharge into drains or the environment, Do not discharge into the sewer.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

Transport document description	: Not Reguklated (Water Based Material - KEEP FROM FREEZING)
UN-No.(DOT)	: Not Reguklated (Water Based Material - KEEP FROM FREEZING)

Additional information

Other information	: No supplementary information available.
-------------------	---

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Water	CAS No 7732-18-5	C>=22.00% ; C<=32.00%
titanium(IV) oxide	CAS No 13463-67-7	C>=8.00% ; C<=12.00%
calcium carbonate	CAS No 471-34-1	C>=24.00% ; C<=32.00%
zinc oxide	CAS No 1314-13-2	C>=0.20% ; C<=0.50%
latex,liquid,synthetic	CAS No	C>=13.00% ; C<=18.00%

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	CAS No 25265-77-4	C>=0.30% ; C<=0.60%
1,2-propanediol	CAS No 57-55-6	C>=0.50% ; C<=0.80%
polyethylenes	CAS No 9002-88-4	C>=0.30% ; C<=0.60%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### 15.2.2. National regulations

### 15.3. US State regulations

Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch()	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

## SECTION 16: Other information

Other information : None.

#### Full text of H-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
H314	Causes severe skin burns and eye damage
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

# Tropical - #951 ETERNAPATCH White Elastomeric Roof Patch

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

### HMIS III Rating

Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

### ZLF-PMS 364 CUSTOM TEMPLATE

*All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.*



## #951 FIBERED ETERNAMASTIC ROOF MASTIC

**TROPICAL ROOFING PRODUCTS' #951 FIBERED ETERNAMASTIC ELASTOMERIC ROOF MASTIC** is a fiber-fortified, durable, white elastomeric flashing compound developed to be a superior reflective material for new roofing, re-roofing, and roof maintenance markets. Easy to apply, fiber reinforced for superior crack-bridging performance. This reflective mastic is a superior choice in maintenance as well as new or re-roofing applications. This flexible mastic should be used at laps, cracks, seams, directional wall changes, screw heads, or any place a roof penetration is made.

**PRODUCT APPLICATION INCLUDES:** Laps, cracks, seams, directional wall changes, screw heads, roof intrusions.

**PRE-TREATMENT:** Treat all surfaces with the appropriate Eternalastic primer.

**COVERAGE:** Apply at a minimum rate of 25–30 linear feet per gallon with 4" to 6" wide 1/8" thick application.

**CURE:** Cures by ultra violet rays; allow for sufficient daylight. Cure time affected by environmental conditions.

**PRECAUTIONS:** DO NOT APPLY IF TEMPERATURE IS BELOW 50° F OR ABOVE 110°F. DO NOT APPLY IF THERE IS A THREAT OF RAIN OR DEW WITHIN 48–72 HOURS. DO NOT ALLOW TO FREEZE. DO NOT THIN. DO NOT HEAT CONTAINER or store at temperatures greater than 120°F. Be sure the lid is tight and the pail is secured when transporting this product. Do not allow pail to tumble as this may loosen the lid and allow leakage or spillage to occur. This coating is not recommended for areas with inadequate drainage (ponding water), over gravel, over walking decks, or old roofs that are too brittle and dry.

**DO NOT APPLY TO FLAT SURFACES WITH POOR DRAINAGE OR WHERE PONDING WATER WILL EXIST.**

**CLEANUP:** Clean tools with mineral spirits or paint thinner.

### **CAUTION! COMBUSTIBLE!**

KEEP OUT OF REACH OF CHILDREN. Close container after each use. DO NOT TAKE INTERNALLY! If swallowed, do not induce vomiting. CALL PHYSICIAN IMMEDIATELY!

MAXIMUM V.O.C = 15 G/L  
VOLUME SOLIDS — 59.9%  
WEIGHT SOLIDS — 75.7%  
CONE PEN VISCOSITY 240 dmm  
ELONGATION — 163%  
TENSILE STRENGTH — 153 PSI

FLORIDA  
1904 SW 31ST AVE  
HALLANDALE, FL 33009  
800.432.2855

CALIFORNIA  
14435 MACAW STREET  
LA MIRADA, CA 90638  
877.827.2622

TEXAS  
1225 BRAI DRIVE  
PORT ARTHUR, TX 77640  
866.727.0091



# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/18/2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
 Product name : Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic  
 Product code : TRO-950  
 Formula : 700-TRO-950

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Elastomeric Roof Coating

#### 1.3. Details of the supplier of the safety data sheet

TROPICAL ROOFING PRODUCTS  
 1904 S.W. 31ST Ave.  
 HALLANDALE, FL 33009 - UNITED STATES  
 T 954-983-3434  
[technical@tropicalroofingproducts.com](mailto:technical@tropicalroofingproducts.com) - [www.tropicalroofingproducts.com](http://www.tropicalroofingproducts.com)

#### 1.4. Emergency telephone number

Emergency number : 800-424-9300  
 Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Corr. 1C H314  
 Muta. 2 H341  
 Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

0

##### Hazard pictograms (GHS-US)



##### Signal word (GHS-US)

: Warning

##### Hazard statements (GHS-US)

: H302 - Harmful if swallowed  
 H317 - May cause an allergic skin reaction  
 H320 - Causes eye irritation  
 H413 - May cause long lasting harmful effects to aquatic life

##### Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P264 - Wash hands, forearms and face thoroughly after handling  
 P273 - Avoid release to the environment  
 P280 - Wear protective gloves, eye protection  
 P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
 P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
 P304+P340 - If inhaled: Remove person to fresh air and keep 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  
 P308+P313 - If exposed or concerned: Get medical advice/attention  
 P310 - Immediately call a doctor, a POISON CENTER  
 P321 - Specific treatment (see eye protection, protective gloves, a POISON CENTER, a doctor on this label)  
 P363 - Wash contaminated clothing before reuse

# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P391 - Collect spillage

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	22 - 32	Not classified
calcium carbonate	(CAS No) 471-34-1	24 - 32	Not classified
latex, liquid, synthetic		13 - 18	Not classified
titanium(IV) oxide	(CAS No) 13463-67-7	8 - 12	Carc. 2, H351
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	(CAS No) 25265-77-4	0.3 - 0.6	Not classified
zinc oxide	(CAS No) 1314-13-2	0.2 - 0.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16 \*The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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

First-aid measures after inhalation : Allow victim to breathe fresh air.

First-aid measures after skin contact : Wash with water and soap. Rinse with water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist. Direct contact with the eyes is likely to be irritating.

First-aid measures after ingestion : Do not induce vomiting. Drink plenty of water. Rinse mouth. Get medical advice/attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after skin contact : May cause moderate irritation.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

Symptoms/injuries after ingestion : No data available.

Chronic symptoms : No effects known.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

No additional information available

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

Fire hazard : Non combustible. Not flammable.

Reactivity : No data available.

### 5.3. Advice for firefighters

Firefighting instructions : No specific fire-fighting instructions required.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with eyes.

# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.  
 Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.  
 Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Wash Always wash hands after handling the product thoroughly after handling. Wash contaminated clothing before reuse.

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

Technical measures : Comply with applicable regulations.  
 Storage conditions : Keep container closed when not in use.  
 Incompatible products : Strong bases. Strong acids.  
 Storage temperature : 4 - 38 °C  
 Storage area : Keep only in the original container. Protect against frost.  
 Special rules on packaging : Keep only in original container. meet the legal requirements.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic	
ACGIH	Not applicable
OSHA	Not applicable
Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
titanium(IV) oxide (13463-67-7)	
OSHA	Not applicable
calcium carbonate (471-34-1)	
ACGIH	Not applicable
OSHA	Not applicable
zinc oxide (1314-13-2)	
OSHA	Not applicable
latex,liquid,synthetic	
ACGIH	Not applicable
OSHA	Not applicable

# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)

ACGIH	Not applicable
OSHA	Not applicable

#### 8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Face shield.
Skin and body protection	: Wear suitable protective clothing.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Colourless
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: < 0 °C
Boiling point	: > 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 10.8 - 11.4 lb/gal
Solubility	: Water: ≈ 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No data available.

#### 10.2. Chemical stability

Not established.

#### 10.3. Possibility of hazardous reactions

Not established.



# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

titanium(IV) oxide (13463-67-7)	
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value)

calcium carbonate (471-34-1)	
LD50 oral rat	6450 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Literature study; >2000 mg/kg; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; Equivalent or similar to OECD 402)
LC50 inhalation rat (mg/l)	> 3 mg/l/4h (Rat; Experimental value)
ATE US (oral)	6450.000 mg/kg bodyweight

zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	> 5.7 mg/l/4h (Rat; Experimental value)

2,2,4-trimethyl-1,3-pentandiol monoisobutyrate (25265-77-4)	
LD50 oral rat	3200 mg/kg (Rat)
LD50 dermal rabbit	> 15200 mg/kg (Rabbit)
ATE US (oral)	3200.000 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Suspected of causing genetic defects (oral).

Carcinogenicity : Not classified.

titanium(IV) oxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact : May cause moderate irritation.

Symptoms/injuries after eye contact : Irritation of the eye tissue.

Symptoms/injuries after ingestion : No data available.

Chronic symptoms : No effects known.

# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

<b>titanium(IV) oxide (13463-67-7)</b>	
LC50 fish 1	> 1000 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	< 1000 mg/l (432 h; Daphnia magna; Static system)
LC50 fish 2	> 1 g/l (96 h; Leuciscus idus)
EC50 Daphnia 2	< 500 mg/l (720 h; Daphnia magna; Static system)
Threshold limit algae 1	61 mg/l (72 h; Pseudokirchneriella subcapitata)
<b>calcium carbonate (471-34-1)</b>	
LC50 fish 1	> 100 % (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 % (48 h; Daphnia magna)
TLM fish 1	> 56000 mg/l (96 h; Gambusia affinis)
Threshold limit algae 1	> 14 mg/l (72 h; Desmodesmus subspicatus; GLP)
Threshold limit algae 2	14 mg/l (72 h; Desmodesmus subspicatus; GLP)
<b>zinc oxide (1314-13-2)</b>	
LC50 fish 1	0.59 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Zinc ion)
EC50 Daphnia 1	0.068 mg/l (48 h; Daphnia magna; Zinc ion)
LC50 fish 2	0.14 mg/l (96 h; Oncorhynchus mykiss)
Threshold limit algae 1	0.136 mg/l (72 h; Pseudokirchneriella subcapitata; Zinc ion)
Threshold limit algae 2	< 0.12 mg/l (Algae; Zinc ion)
<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
LC50 fish 1	30 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	147.8 mg/l (48 h; Daphnia sp.)
Threshold limit algae 1	3.28 mg/l (72 h; Selenastrum capricornutum; Biomass)
Threshold limit algae 2	18.4 mg/l (72 h; Selenastrum capricornutum; Growth)

#### 12.2. Persistence and degradability

<b>Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic</b>	
Persistence and degradability	Not established.
<b>titanium(IV) oxide (13463-67-7)</b>	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>calcium carbonate (471-34-1)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil.
ThOD	Not applicable (inorganic)
<b>zinc oxide (1314-13-2)</b>	
Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>latex,liquid,synthetic</b>	
Persistence and degradability	Biodegradability in soil: no data available.
Biochemical oxygen demand (BOD)	0.01 g O <sub>2</sub> /g substance

# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.1 g O <sub>2</sub> /g substance
ThOD	2.4 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

<b>Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic</b>	
Bioaccumulative potential	Not established.
<b>titanium(IV) oxide (13463-67-7)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>calcium carbonate (471-34-1)</b>	
Log Pow	-2.12 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>zinc oxide (1314-13-2)</b>	
Log Pow	1.53 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>latex,liquid,synthetic</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>2,2,4-trimethyl-1,3-pentanediol monoisobutyrate (25265-77-4)</b>	
Log Pow	3.47 (Experimental value)

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer	:
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Avoid release to the environment. Do not discharge into drains or the environment, Do not discharge into the sewer.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

Additional information

Other information	: No supplementary information available.
-------------------	---

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

# Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic

Listed on United States SARA Section 313

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Water	CAS No 7732-18-5	C>=22.00% ; C<=32.00%
titanium(IV) oxide	CAS No 13463-67-7	C>=8.00% ; C<=12.00%
calcium carbonate	CAS No 471-34-1	C>=24.00% ; C<=32.00%
zinc oxide	CAS No 1314-13-2	C>=0.20% ; C<=0.50%
latex,liquid,synthetic	CAS No	C>=13.00% ; C<=18.00%
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	CAS No 25265-77-4	C>=0.30% ; C<=0.60%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

##### CANADA

No additional information available

##### EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### 15.2.2. National regulations

#### 15.3. US State regulations

##### Tropical - #950 ETERNAMASTIC Elastomeric Roof Mastic()

U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

### SECTION 16: Other information

Other information : None.

# Tropical - #509 All Weather Modified Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility	: Water: 0 % Acetone: ≈ g/100ml Organic solvent: ≈ 100 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available

### 9.2. Other information

VOC content : < 250 (≤ 250) g/l

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed.

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified  
(Lack of data)

asphaltic bitumen, not cut back (8052-42-4)	
LD50 oral rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)

cellulose (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6 mg/l/4h (Rat)

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : May cause genetic defects (Dermal, Inhalation).  
Carcinogenicity : May cause cancer (Inhalation, Dermal).

asphaltic bitumen, not cut back (8052-42-4)	
IARC group	3 - Not classifiable

attapulgite (12174-11-7)	
IARC group	2B - Possibly carcinogenic to humans, 3 - Not classifiable

SBR-latex (9003-55-8)	
IARC group	3 - Not classifiable

# Tropical - #509 All Weather Modified Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Causes damage to organs (central nervous system, eye, Skin, lung, liver) through prolonged or repeated exposure (Dermal, Inhalation).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause an allergic skin reaction.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction. May cause moderate irritation.
Symptoms/injuries after eye contact	: Eye irritation.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:

### SECTION 12: Ecological information

#### 12.1. Toxicity

asphaltic bitumen, not cut back (8052-42-4)	
LC50 fish 1	> 1000 mg/l (96 h; Pisces)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)
cellulose (9004-34-6)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Threshold limit algae 1	> 100 mg/l (Algae)

#### 12.2. Persistence and degradability

Tropical - #509 All Weather Modified Mastic	
Persistence and degradability	Not established.
asphaltic bitumen, not cut back (8052-42-4)	
Persistence and degradability	Not readily biodegradable in water.
attapulgit (12174-11-7)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
cellulose (9004-34-6)	
Persistence and degradability	Biodegradable in water.
kaolin (1332-58-7)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
SBR-latex (9003-55-8)	
Persistence and degradability	Biodegradability in water: no data available.

#### 12.3. Bioaccumulative potential

Tropical - #509 All Weather Modified Mastic	
Bioaccumulative potential	Not established.

# Tropical - #509 All Weather Modified Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>asphaltic bitumen, not cut back (8052-42-4)</b>	
Log Pow	> 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.
<b>attapulgite (12174-11-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>cellulose (9004-34-6)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>kaolin (1332-58-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>Stoddard solvent (8052-41-3)</b>	
Log Pow	3.16-7.06
<b>SBR-latex (9003-55-8)</b>	
Bioaccumulative potential	No bioaccumulation data available.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.

Additional information : Industrial waste.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

Transport document description : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated, III

UN-No.(DOT) : Combustible Liquid - DOT 49 CFR 173.150 SUB.PAR.F. Unregulated

Packing group (DOT) : III - Minor Danger

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

**Tropical - #509 All Weather Modified Mastic**

Not listed on the United States SARA Section 313

**asphaltic bitumen, not cut back (8052-42-4)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Tropical - #509 All Weather Modified Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>attapulgit (12174-11-7)</b>
Not listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>cellulose (9004-34-6)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>kaolin (1332-58-7)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Stoddard solvent (8052-41-3)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### 15.2.2. National regulations

### 15.3. US State regulations

<b>Tropical - #509 All Weather Modified Mastic()</b>	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

<b>attapulgit (12174-11-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

#### **asphaltic bitumen, not cut back (8052-42-4)**

U.S. - New Jersey - Right to Know Hazardous Substance List

#### **cellulose (9004-34-6)**

U.S. - New Jersey - Right to Know Hazardous Substance List

#### **kaolin (1332-58-7)**

U.S. - New Jersey - Right to Know Hazardous Substance List

#### **Stoddard solvent (8052-41-3)**

U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : None.



# Tropical - #509 All Weather Modified Mastic

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Full text of H-phrases:

Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 1B	Germ cell mutagenicity, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure

### HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 2 Moderate Hazard  
Physical : 0 Minimal Hazard  
Personal Protection : p

### ZLF-PMS 364 CUSTOM TEMPLATE

*All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.*



## #509 ALL WEATHER MODIFIED MASTIC

**TROPICAL ROOFING PRODUCTS' #509 ALL WEATHER MODIFIED MASTIC** is a heavy duty commercial - grade rubber modified mastic specifically designed to be applied by the professional roofer under all weather conditions, wet or dry. #509 will bond under water for temporary or permanent repairs. #509 ALL WEATHER MODIFIED MASTIC is specifically designed for use with modified bitumen membranes, base sheets and ply sheets. The modified properties provides excellent adhesion, elongation and recovery characteristics. #509 ALL WEATHER MODIFIED MASTIC adheres to all surfaces wet or dry. Can be used on all flashings, around skylights, gutters, crevices, seams, flashings and repairs on SBS modified membranes. #509 ALL WEATHER MODIFIED MASTIC is excellent for repairs on conventional Built Up Roofing membranes where substrate movement is expected to occur. #509 ALL WEATHER MODIFIED MASTIC eliminates burn hazards associated with hot kettles and propane torches, and is ideal where their use is prohibited. This product is formulated for repairs and seams on SBS Asphalt Modified Roll Roofing Sheets. Easy spreading and application in all weather conditions. Specially formulated for anti-sag properties and will not crack under high heat conditions. Carefully mixed homogeneous blend of high-grade fibers, select asphalt, minerals, plasticizers, and aromatic hydrocarbons. Fortified with Power Gel Technology so it will remain highly resilient and durable through all seasons. Recommended Substrate application on BUR, SHINGLE, TILE, MOD BIT, CONCRETE & METAL. **NOTE: DO NOT use on APP, TPO, EPDM, or PVC.** Meets ASTM D 4586 and ASTM D 3409. Miami-Dade NOA Compliant.

**PREPARATION:** Surface must be clean and free from rust or any other foreign matter that would interfere with a good bond. For best results in cold weather, store at room temperature for 24 hours prior to application.

**APPLICATION:** Use a trowel, putty knife or gloved hand to repair cracks, tears, holes, and breaks by applying cement 1/8" to 1/4" thick. Apply and work cement into break or crack, then apply cement 2"-4" beyond the problem area feathering the edges. Embed fabric to reinforce cement, then cover with additional cement, if problem area is over 1/4" wide or 2" long.

**COVERAGE:** Apply at a minimum rate of 40 linear ft. per gallon with 4" wide 1/8" thick application.

**PRECAUTIONS: DO NOT ALLOW TO FREEZE. DO NOT THIN. DO NOT HEAT CONTAINER** or store at temperatures greater than 120°F. Be sure the lid is tight and the pail is secured when transporting this product. Do not allow pail to tumble as this may loosen the lid and allow leakage or spillage to occur.

**CLEANUP:** Clean tools with mineral spirits or paint thinner.

Contains petroleum distillate. Keep away from heat and flame. **USE ONLY WITH ADEQUATE VENTILATION!** Avoid contact with skin and breathing of vapor. **CLOSE AIR INTAKES** on roof until solvents dissipate. **KEEP OUT OF REACH OF CHILDREN.** Close container after each use. **DO NOT TAKE INTERNALLY!** If swallowed, do not induce vomiting. **CALL PHYSICIAN IMMEDIATELY!** Contains volatile solvents that might contaminate potable water.

MAXIMUM V.O.C = 250 G/L  
CONSISTENCY — THICK SOFT MASTIC  
WEIGHT — 8.7 LBS. PER GAL  
FLASH POINT (T.C.C.) — 105°F+ SERVICE  
TEMPERATURE (RANGE) — 40°F - 100°F



ASTM D 4586 ASTM D 3409

FLORIDA  
1904 SW 31ST AVE  
HALLANDALE, FL 33009  
800.432.2855

CALIFORNIA  
14435 MACAW STREET  
LA MIRADA, CA 90638  
877.827.2622

TEXAS  
1225 BRAI DRIVE  
PORT ARTHUR, TX 77640  
866.727.0091