



Issue date: 05/01/2015

## 1. Product and Company Identification

Product Name: Solar Seal – White - VOC Compliant Sealant  
 Product Type: Elastomeric Sealant, non-chemically curing  
 Product Number: 953

Company Address:  
 NPC Sealants  
 1208 S. 8th Ave.  
 Maywood, Ill. 60153 USA

Contact Information:  
 Telephone: 708-681-1040 M-F 8-5  
 Medical emergency: Contact local poison control center  
 After hours Transport Emergency Phone:  
 1-800-424-9300 (toll free) 1-703-527-3887

## 2. Hazards identification

### Emergency Overview

Physical State:	Paste	<u>HMIS</u>	
Color:	White	Health	2
Odor:	Solvent	Flammability	3
		Physical Hazard	0
		Personal Protection	See Section 8

SIGNAL WORD: DANGER

H225 HIGHLY FLAMMABLE LIQUID AND VAPOR  
 H315 CAUSES SKIN IRRITATION  
 H319 CAUSES SERIOUS EYE IRRITATION  
 H302 + H332 HARMFUL IF SWALLOWED OR INHALED  
 H336 MAY CAUSE DROWSINESS OR DIZZINESS

GHS HAZARD CLASS:

FLAMMABLE LIQUID: HAZARD CATEGORY 2. SKIN IRRITATION: HAZARD CATEGORY 2. EYE IRRITATION:  
 HAZARD CATEGORY 2A. STOT-SE: HAZARD: CATEGORY 3

PICTOGRAMS:



Precautionary statements.

**PREVENTION.** Keep away from heat, sparks, open flames and hot surfaces [P210]. Keep container tightly closed [P233]. Use only non-sparking tools [P242]. Take precautionary measures against static discharge [P243]. Wear protective gloves, protective clothing, eye protection and face protection [P280]. Wash hands thoroughly after

handling [P264]. Avoid breathing fumes, mist, vapors, or spray [P261]. Use only outdoors or in a well-ventilated area [P271].

**RESPONSE.** If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower [P303+P361+P353]. If skin irritation occurs:/Get medical advice/attention [P332+313]. If inhaled: Remove person to fresh air and keep comfortable for breathing [P304+P340]. If (uncured product) swallowed: Immediately call a POISON center or doctor/physician. Do not induce vomiting [P301+P310+P331]. If in eyes: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/attention. [P305+P337+P338+351+313].

In case of fire: Use dry chemicals, CO2, water fog or foam to extinguish [P370 + P378].

**STORAGE:** Store in a well ventilated place. Keep cool [P403+235]. Keep container tightly closed [P233]. Store locked up and out of reach of children [P405 +P102]

**DISPOSAL:** Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations [P401].

### 3. Composition/information on ingredients

Components	CAS#	Percent*
Limestone	1317-65-3	10-30
t-Butyl Acetate	540-88-5	2-20
PCBTF	98-56-6	2-25
Aromatic Petroleum Distillates	64742-94-6	2-3.9
Quartz (SiO2)**	14808-60-7	0.1 - 1.5
Titanium Dioxide	13463-67-7	3-10
Trimethylbenzenes***	95-63-6	0.64 – 1.25
Xylenes****	1330-20-7	0-0.09
Cumene****	100-41-4	0-0.04

\*Exact percentage is a trade secret. Range is provided to assist user in selecting appropriate protections.\*\*naturally occurring minor constituent of 1317-65-3. \*\*\* constituent of 64742-94-6. \*\*\*\*may be constituents of 64742-94-6.

All other ingredients, including proprietary (trade secret) hydrocarbon resins and elastomers, are considered non hazardous. The main hazard of Titanium Dioxide and limestone (& quartz) is dust inhalation. Because of incorporation into sealant, exposure by inhalation is unlikely.

### 4. First-aid measures

Skin Contact:	Rinse with running water and soap. If symptoms develop and persist, seek medical attention.
Inhalation:	If inhaled, remove the affected person to fresh air. If breathing is difficult, give oxygen. If symptoms develop and persist, seek medical attention.
Eye contact:	Flush eyes with water for 15 minutes, and seek immediate medical attention.
Ingestion:	If uncured sealant is ingested, do not induce vomiting. Seek medical attention immediately.
Notes to physician:	Treat symptomatically and supportively.

## 5. Fire-fighting measures

- Extinguishing Media: Dry Chemical, Foam, Carbon Dioxide, Water Fog or Spray, In case of fire, keep containers cool with water spray.
- Special Firefighting Procedure: Under fire emergency conditions, it is recommended that full protection equipment be used, including NIOSH approved self-contained breathing apparatus to protect fire fighters from any hazardous combustion products. Wear full protective clothing.
- Unusual Fire & Explosion Hazards: During emergency conditions, over exposure to combustion products such as smoke and carbon monoxide may cause a health hazard.
- General Fire Hazards Caution: Flammable vapors. Vapors are heavier than air and may travel to distant ignition sources. Keep containers closed. Use with adequate ventilation.
- Hazardous Combustion Products: Carbon dioxide. Carbon Monoxide.

## 6. Accidental release measures

Use personal protection recommended in section 8 as required to maintain exposure below applicable exposure limit. Restrict area access to necessary personnel.

- Environmental precautions: Ventilate area. Keep upwind of spill. Prevent further leakage or spillage if safe to do so. Do not allow product to enter sewer or waterways.
- Clean up methods: Remove all sources of ignition. Cover material in inert absorbent and place into a appropriate closed container.
- Waste Disposal Method: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

## 7. Handling and Storage:

When handling uncontained material, use protective equipment as described in Section 8 to maintain exposure below the applicable exposure limit. Use only in well ventilated areas. This product is intended for exterior use only.

Store in a cool, dry well ventilated area. Store away from sources of ignition. Do not heat or pressurize containers. Keep out of reach of children. Do not reuse empty containers.

## 8. Exposure controls/personal protection:

Employers should complete an assessment of all workplaces to determine the need for and selection of proper exposure controls and protective equipment for each task performed.

Hazardous Components	ACGIH TLV	OSHA PEL	AIHA WEEL
t-Butyl Acetate	200 ppm TWA	950 mg/m <sup>3</sup>	none
PCBTF	none	none	none
Aromatic Petroleum Distillates	100 ppm TWA	100 ppm TWA	none

Limestone	10 mg/m3 TWA total dust	5 mg/m3 TWA respirable fraction 15 mg/m3 TWA total dust	none
Quartz (SiO2)*	0.025 mg/m3 TWA respirable fraction	0.1 mg/m3 TWA respirable fraction 0.3 mg/m3 TWA total dust	none
Titanium Dioxide	10 mg/m3 TWA	15 mg/m3 TWA total dust	none
Trimethylbenzenes	25 ppm TWA	50 ppm (245 mg/m3) TWA	none
Xylenes**	100 ppm TWA 150 ppm STEL	100 ppm (435 mg/m3) TWA	none
Cumene**	50 ppm	50 ppm (245 mg/m3) TWA	none

\* Naturally occurring constituent of limestone \*\*May be low level constituents of petroleum distillates

**Engineering controls:** Intended for outdoor use, or unoccupied dwellings having forced fresh air ventilation. Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

**Respiratory Protection:** Not needed under expected exterior conditions of use, but avoid concentrating vapors in any closed area. Use a NIOSH approved air purifying respirator if the potential to exceed established limits exists. When required, a respirator program following 29CFR 1910.134 should be followed. NIOSH approved organic vapor purifying respirator may be used for the voluntary reduction of nuisance odors. Detection (50%) limit threshold is 10 ppb for TBAC.

**Eye/face protection:** Safety goggles or safety glasses with side shields are prudent practices.

**Skin Protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact.

## 9. Physical and chemical properties

**Physical State:** Solid paste  
**Color:** White  
**Solubility:** Not available. Not water soluble.  
**Specific Gravity (20 °C):** 1.2  
**Relative Vapor Density (air=1):** Not available, heavier than air.  
**Vapor Pressure (20 °C):** Not available.  
**Evaporation rate:** Not available. Slower than ether.  
**Odor:** Strong solvent odor. Relevant components: TBAC is detectable at 71ppb (10 ppb 50% threshold) with a sweet ester/camphor solvent odor. PCBTF and aromatic petroleum distillates have an aromatic solvent odor.  
**Odor Threshold:** No available.  
**Flash Point (°C):** Not available. Product is a solid paste. Burn rate unknown. [Flammable components: TBAC solvent has a flash point of 40°F (4.4°C). It is a flammable liquid as defined under SARA Title III, section 311/312 hazard category but is not subject to the reporting requirements of SARA Title III, section 313. PCBTF solvent exhibits a flash point of 109° F (42.8° C), but is

a non-regulated material under the DOT Hazardous Material Regulations and the IMDG Code because it does not sustain combustion.]

Flammable/explosion Limits-lower: Not available  
Flammable/explosion Limits-upper: Not available  
Autoignition Temperature (°C): Not available  
Melting Point/Range (°C): Not available  
Boiling Point/Range (°C): Not available  
pH: Not applicable  
Partition Coefficient[Oct/water]: Not available  
VOC (w/w%): <4%  
Decomposition temperature: Not available

## 10. Stability and reactivity

Chemical stability: This material is thermally stable when stored and used as directed. Hazardous polymerization will not occur.

Conditions to avoid: Avoid high temperatures, flame, sparks and other ignition sources.

Incompatible Materials: None known. It is prudent to avoid strong oxidizing agents with carbon based systems.

Hazardous decomposition products: Oxides of carbon, smoke and other toxic fumes.

Hazardous reactions: None known. Unlikely to occur.

## 11. Toxicological information

Relevant Routes of exposure: Skin, Inhalation

### Potential health effects

Skin Contact: Repeated or prolonged skin contact may cause skin irritation and or dermatitis in sensitive persons.

Inhalation: Over exposure to vapors may cause dizziness, headaches and respiratory tract irritation. Exposure to high doses may cause central nervous system depression. People with a history of chemical sensitivity should be advised this product contains petroleum solvents. Reports have associated prolonged and repeated overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately inhaling concentrated fumes may be harmful or fatal.

Eye contact: Direct contact symptoms can include significant irritation, redness and tearing.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

No available information regarding existing conditions aggravated by exposure.

Hazardous Components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
t-Butyl Acetate	No	No	No
PCBTF	No	No	No
Aromatic Petroleum Distillates	No	No	No

Titanium Dioxide	No	Group 2B	No
Limestone	No	No	No
Quartz (SiO <sub>2</sub> ) *	Known human carcinogen	Group 1	No
Trimethylbenzenes	No	No	No
Cumene**	Suspect	Group 2B	No
Xylenes**	No	No	No

\* naturally occurring constituent of limestone \*\*may be low level constituents of petroleum distillates

Hazardous Components	Health Effects/Target Organs
t-Butyl Acetate	Irritant, Central Nervous System
PCBTF	Adrenals, Blood, CNS, Immune system, Irritant, Kidney, Liver, Lung, Skin, Thyroid
Aromatic Petroleum Distillates	Irritant, Central Nervous System
Titanium Dioxide	Irritant, Respiratory, Some Evidence of Carcinogenicity
Limestone	Nuisance dust
Quartz (SiO <sub>2</sub> )	Immune system, Lung, Some evidence of carcinogenicity
Trimethylbenzenes	Irritant, Central Nervous System
Cumene	Irritant, Central Nervous System
Xylenes	Irritant, Central Nervous System

Sensitization: None known.  
Chronic: Possible skin and eye irritant. IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. The IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint"  
Carcinogenicity: NTP: No, IARC: No, OSHA: No.  
Mutagenicity: None known.  
Medical Conditions Aggravated by Exposure: None known.  
Reproductive Toxicity: None known.  
Acute Toxicity Values: Not determined.

## 12. Ecological information

No data are available on the adverse effects of this material on the environment. TBAc solvent has been shown to biodegrade in standard closed-bottle laboratory tests using acclimated and non-acclimated microorganisms. 28-day biological oxygen demand (BOD) expressed as % of chemical oxygen demand (COD) ranged from 28% with EPA-approved Polyseed to 75% with acclimated Delcora sludge typically found in Publicly-Owned Treatment Works (POTW). Chemicals with BOD greater than 60% of their COD are generally considered to be "readily biodegradable". PCBTF has neither COD nor BOD data available. Volatility, and relative environmental partitioning characteristics, makes it unlikely that PCBTF represents a significant threat to aquatic or terrestrial environments. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. Additional ingredients have neither COD nor BOD data available. None of the ingredients in this mixture are classified as a Marine Pollutant. Avoid contaminating waterways.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Mobility: No information available. Based on the chemical composition, volatile substances are likely to enter the atmosphere. No accumulation is expected. TBAC and PCBTF are approved as exempted non-VOC solvents.

### 13. Disposal considerations

All waste must be disposed in accordance with Federal, State, and Local Regulations (see 40 CFR Part 268). It is the responsibility of the user to determine at time of disposal whether a material containing the product or derived from the product should be classified as a solid or hazardous waste.  
US EPA waste number : D001, Ignitable waste.

### 14. Transport information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

Flammability Classification: OSHA: Class IB Viscous mixture with Flash Point: <110°F, TCC  
DOT: 173.150 (c) "Consumer Commodity", Class ORM-D Material.  
173.121, Class 3(b) E 173.150

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities: Xylenes,

Proper shipping name Adhesives  
Hazard Class 3  
Identification number UN 1133  
Packing group III

Canada (TDG)

Proper shipping name Adhesives  
Hazard Class 3  
Identification number UN 1133  
Packing group III  
QUANTITY, (ERG#160)

International or Air Shipments in non-bulk containers, 172.101 Flammable Liquid, n.o.s. UN1993, Packaging Group III.

### 15. Regulatory information

United States Regulatory information:

All components comprising this product are listed on the TSCA 8(b) inventory.

TSCA Export notification 12(b) list: Solvent (CAS#98-56-6)  
CERCLA/SARA Section 302 EHS None above reporting limits  
CERCLA/SARA Section 311/312 EHS Immediate Health, Delayed Health, Fire  
CERCLA/SARA Section 313 EHS Xylenes (CAS#1330-20-7) Trimethylbenzene (95-63-6)  
CA Proposition 65: This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm.

Canadian Regulatory:  
CEPA DSL/NDSL Status : All components comprising this product are listed on the Canadian DSL.  
WHMIS hazard Class: B.2, D.2a. D.2b

## 16. Other information

**Prepared by:** NPC Technical Staff

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