

TREMCO

3735 GREEN ROAD
BEACHWOOD, OHIO 44122-8069

MATERIAL SAFETY DATA SHEET
TELEPHONE: (216) 292-5000

EMERGENCIES: (216) 765-6727 8:30-5:00 EST
AFTER HOURS: CHEMTREC (800) 424-9300

SECTION 1

Product Name: VULKEM 921
Chemical Name: POLYURETHANE SEALANT
Chemical Family:
Product Code: 921-7XX
MSDS Preparer: R. A. MIKOL
Date Prepared: 06-MAY-99
Replaces Date: 16-DEC-96

Section 2 - Molecular Composition

Common Name and Chemical Name Exposure Limits	Weight %	CAS Number
AROMATIC POLYISOCYANATE RESIN OSHA:TWA - STEL - ACGIH:TWA - STEL -	35.0-45.0	Trade Secret
CALCIUM CARBONATE (LIMESTONE) OSHA:TWA 15 mg/M3 STEL - ACGIH:TWA 10 mg/M3 STEL -	15.0-40.0	1317-65-3 (total dust, 5mg/M3 respirable fraction) (total dust, no asbestos, <1% SiO2)
PLASTICIZER OSHA:TWA - STEL - ACGIH:TWA - STEL -	10.0-30.0	Trade Secret
TITANIUM DIOXIDE OSHA:TWA 10 mg/M3 STEL - ACGIH:TWA 10 mg/M3 STEL -	0.0-5.0	13463-67-7 (total dust, no asbestos, <1% SiO2)
AROMATIC PETROLEUM DISTILLATES OSHA:TWA - STEL - ACGIH:TWA - STEL -	1.0-5.0	64742-95-6
KAOLIN (CLAY) OSHA:TWA 10 mg/M3 STEL - ACGIH:TWA 2.00 mg/M3 STEL -	1.0-5.0	1332-58-7 (total dust, 2mg/M3 respirable fraction) (total dust, no asbestos, <1% SiO2)
1,2,4-TRIMETHYL BENZENE (PSEUDOCUMENE) OSHA:TWA - STEL - ACGIH:TWA - STEL -	1.0-3.0	95-63-6
DIPHENYLMETHANE DIISOCYANATE OSHA:TWA - Ceil 0.020ppm ACGIH:TWA 0.005ppm STEL -	0.1-0.8	26447-40-5
4,4'-METHYLENE BIS(PHENYLISOCYANATE) OSHA:TWA - Ceil 0.020ppm ACGIH:TWA 0.005ppm STEL -	0.1-1.5	101-68-8
CRYSTALLINE SILICA (QUARTZ) OSHA:TWA 0.10 mg/M3 STEL - ACGIH:TWA 0.10 mg/M3 STEL -	0.1-0.5	14808-60-7 (respirable dust) (respirable dust)
IRON OXIDE OSHA:TWA 10 mg/M3 STEL - ACGIH:TWA 5 mg/M3 STEL -	0.0-3.0	1309-37-1 (dust, fume as Fe) (fume as Fe)
CARBON BLACK OSHA:TWA 3.50 mg/M3 STEL - ACGIH:TWA 3.50 mg/M3 STEL -	0.0-1.0	1333-86-4

Section 3 - Hazards Identification

Emergency Overview:

An RPM Company

Various colored pastes. Can cause headache, irritation, nausea, drowsiness, stupor, coughing spell and allergic respiratory sensitization. Leave area to breathe fresh air. Should be observed by physician immediately if overexposure is severe.

Potential Hlth Effect/Rte of Entry:

Inhalation:

Can cause headache, irritation, nausea, drowsiness, stupor, coughing spell and allergic respiratory sensitization.

Eyes:

May cause eye irritation including stinging, tearing, redness, and swelling.

Ingestion:

May cause gastrointestinal irritation. Aspiration during swallowing or vomiting may cause lung damage and can be fatal. Swallowing large amounts may be harmful and cause CNS effects described above including death.

Skin:

May cause drying, cracking, irritation, and burns.

Aggravated Medical Conditions:

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Acute Health Effects:

See effects described above.

Chronic Health Effects:

Prolonged or repeated contact/exposure to aromatic petroleum distillates may cause defatting, drying, and irritation of the skin, dermatitis, and central nervous system (CNS) effects described above. Diphenylmethane diisocyanate (methylene bisphenyl isocyanate) caused an increased incidence of lung tumors in experimental animals following long term inhalation at concentrations in excess of 100 times the exposure limit. Overexposure to isocyanate can cause a decrease in lung function. Skin and respiratory sensitization is possible. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous

system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Section 4 - First Aid Measures

Inhalation:

Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention immediately.

Eyes:

Flush immediately with running water for 15 minutes, lifting the upper and lower lids occasionally. Get medical attention immediately.

Ingestion:

Get medical attention immediately.

Skin:

Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.

Notes to Physician: N/A

Section 5 - Fire Fighting Measures

Flash Point: 195F
Method: SETAFLASH
Lower Flammability Limit: NOT ESTABLISHED
Upper Flammability Limit: NOT ESTABLISHED

Autoignition Temperature: NOT ESTABLISHED

Extinguishing Media:

Water fog.

Fire and Explosion Hazards:

Not Applicable

Special Fire Fighting Procedures:

During a fire, personnel at the scene are to prevent exposure to fumes using accepted fire fighting techniques.

Fire Fighting Equipment: N/A

Other Precautions:

Hydrocyanic acid, oxides of nitrogen can form.

Section 6 - Accidental Release Measures

Release Response Overview:

Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal.

Section 7 - Handling and Storage

Handling and Storage Precautions:

Store under normal warehouse conditions. Prevent inhalation of vapor, ingestion, and contact with skin and eyes. Keep container closed when not in use. Precautions also apply to emptied containers. Keep container

closed when not in use. Vapor may migrate to sources of ignition. Do not smoke, weld, generate sparks, or use flame near container. Change soiled workclothes frequently. Clean hands thoroughly after handling. Precautions also apply to emptied containers. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment.

Section 8 - Exposure Controls/Personal Protection

Respiratory:

Wear appropriate, properly fitted NIOSH/MSHA approved respirator, as directed by the manufacturer, when the airborne contaminant level(s) exceed the exposure limits indicated in Section 2 of the MSDS.

Skin:

Protect hands with impervious rubber gloves and wear typical full cover clothing. Prevent contact with skin.

Eyes:

Wear suitable safety eyewear.

Face:

Not required.

Engineering:

Use local exhaust when the general ventilation is not sufficient to keep the airborne contaminant concentration below the exposure limit in Section 2 of the MSDS.

Section 9 - Physical and Chemical Properties

Odor/Appearance: PETROLEUM SOLVENT/VARIOUS COLORED PASTE
Color: VARIOUS
Physical State: PASTE
pH: N/A
Vapor Pressure: N/A
Vapor Density: >1
Boiling Point: N/A

Melting Point: N/A
Freezing Point: N/A
Solubility in Water: NEGLIGIBLE
Specific Gravity: 1.285
% Volatile Weight: 5.0

Section 10 - Reactivity/Stability

Stability:
Stable
Incompatible Products:
Avoid contact with strong oxidizing agents.
Conditions to Avoid Polymerization:
Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Eyes: SEE SECTION 3
Ingestion: " " "
Inhalation: " " "
Skin: " " "
Subchronic: " " "
Chronic: " " "

Section 12 - Ecological Information

Ecotoxicological Data: N/A
Chemical Fate: N/A

Section 13 - Disposal Considerations

RCRA Class: N/A
Disposal Method: .
Waste not regulated under RCRA. Dispose of waste in compliance with state and local regulations.

EPA Reportable Quantities

N/A

Section 14 - Transportation Data

DOT Shipping Name: NOT REGULATED
DOT Hazard Class:
DOT Label:
UN/NA Number:
Packing Group:
Special Provisions:
Packaging

Exceptions:
Non-Bulk:
Bulk:

Quantity Limitations

Passenger Aircraft or Railcar:
Cargo Aircraft:
Vessel Stowage Requirements

Vessel Stowage:

Other Stowage:

Transportation Notes: N/A

Section 15 - Regulatory Information

TSCA Status: On the TSCA Inventory
OSHA Status: Considered hazardous based on the following criteria:
Irritant
Sensitizer

Target Organs

Eye
Nerve
Lung
Skin

OSHA Hazardous Components	CAS Number
KAOLIN (CLAY)	1332-58-7
CALCIUM CARBONATE (LIMESTONE)	1317-65-3
* CRYSTALLINE SILICA (QUARTZ)	14808-60-7
* CARBON BLACK	1333-86-4
TITANIUM DIOXIDE	13463-67-7
IRON OXIDE	1309-37-1
DIPHENYLMETHANE DIISOCYANATE	26447-40-5
4,4'-METHYLENE BIS(PHENYLISOCYANATE)	101-68-8

* - CHEMICAL IS LISTED AS AN IARC, NTP, OSHA, or ACGIH CARCINOGEN

Compliance Quantities

N/A

SARA 311 Ratings

Immediate Health Hazard: Y
Delayed Health Hazard: Y
Fire Hazard: N
Reactivity Hazard: N
Sudden Release of Pressure Hazard: N

SARA 313 Ingredients	CAS Number
1,2,4-TRIMETHYL BENZENE (PSEUDOCUMENE)	95-63-6
DIPHENYLMETHANE DIISOCYANATE	26447-40-5
4,4'-METHYLENE BIS(PHENYL ISOCYANATE)	101-68-8

Proposition 65 Ingredients

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm.

	CAS Number
CRYSTALLINE SILICA (QUARTZ)	14808-60-7
AROMATIC PETROLEUM DISTILLATES	64742-95-6

Section 16 - Other Information

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.
THE HAZARD INFORMATION HEREIN IS OFFERED SOLELY FOR THE CONSIDERATION OF THE USER, SUBJECT TO HIS OWN INVESTIGATION OF COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE SAFE USE OF THE PRODUCT UNDER EVERY FORESEEABLE CONDITION.

