

**VULKEM 116 LIMESTONE**Version 2.  
REVISION DATE: 10/08/2008

Print Date 10/09/2008

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : VULKEM 116 LIMESTONE  
 Product code : 426805 323

COMPANY : Tremco Incorporated  
 3735 Green Road  
 Cleveland, OH 44122

Telephone : (216) 292-5000 8:30 - 5:00 EST  
 Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST  
 After Hours: Chemtrec 1-800-424-9300

Product use : Sealant

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Limestone. Non-sag gunnable paste. May cause slight irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : May cause slight irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization.

Eyes : Direct contact may cause mild irritation.

Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.

Skin : May cause sensitization resulting in irritation, itching and redness.

**Aggravated Medical Conditions**

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

**Chronic Health Effects**

Overexposure may cause dermatitis, asthma, skin and respiratory sensitization and decreased lung function. 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. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. Fillers are encapsulated and not expected to be released from product under normal conditions of use. Prolonged or repeated exposure to mineral spirits (petroleum naphtha or stoddard solvent) may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, and adverse liver, kidney, and lung effects.

**Target Organs:** Skin, Eye, Ingestion, Lung

**SECTION 3 - PRODUCT COMPOSITION**

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Chemical Name	CAS-No.	Weight %
Aromatic Polyisocyanate Resin	NJ TSRN# 51721300-5270P	30.0 - 60.0
Diisodecyl phthalate	26761-40-0	15.0 - 40.0
Calcium Carbonate (Limestone)	1317-65-3	10.0 - 30.0
Tackifier	NJ TSRN# 51721300-5272P	5.0 - 10.0
Thickener	NJ TSRN# 51721300-5300P	3.0 - 7.0
Titanium dioxide	13463-67-7	3.0 - 7.0
Petroleum distillates	64742-47-8	1.0 - 5.0
Butyl benzyl phthalate	85-68-7	- <1.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	- <1.0
Toluene-2,6-Diisocyanate	91-08-7	- <0.1
2,4-Toluene diisocyanate	584-84-9	- <0.1
o-Cresol	95-48-7	- <0.1

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

- Inhalation** : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel.
- Eye contact** : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact** : Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion** : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point** : 150 °F, 66 °C
- Method** : Tag Closed Cup
- Lower explosion limit** : 0.60 %(V) Solvent
- Upper explosion limit** : 7 %(V) Solvent
- Autoignition temperature** : Not available.
- Extinguishing media** : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products** : Carbon monoxide and carbon dioxide can form. Hydrocyanic acid and nitrogen oxides can form.
- Protective equipment for firefighters** : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Scrape up and transfer to appropriate container for disposal.

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**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of vapor, ingestion and contact with skin, eyes and clothing. Preferably use entire contents in one continuous work session. Do not smoke, weld, generate sparks, or use flame near container. Change soiled work clothes frequently. Clean hands thoroughly after handling. Do not store or use near food. Keep container closed when not in use. Since emptied containers retain product residue and vapor, observe precautions even after container is emptied. Store under dry warehouse conditions away from heat and all ignition sources.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Use safety glasses if eye contact is likely.
- Skin and body protection : Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use general ventilation and/ or local exhaust to reduce the airborne contaminant concentration below the exposure limit listed in the MSDS

**Exposure Limits**

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Regulation</b>	<b>Limit</b>	<b>Form</b>
Calcium Carbonate (Limestone)	1317-65-3	OSHA PEL:	5 mg/m3	Respirable fraction.
		OSHA PEL:	15 mg/m3	Total dust.
		ACGIH TWA:	3 mg/m3	Respirable particles.
		ACGIH TWA:	10 mg/m3	Inhalable particles.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
Titanium dioxide	13463-67-7	ACGIH TWA:	10 mg/m3	
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
Petroleum distillates	64742-47-8	ACGIH TWA:	200 mg/m3	Non-aerosols total hydrocarbon vapor
		ACGIH TWA:	200 mg/m3	Non-aerosols total hydrocarbon vapor

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Chemical Name	CAS Number	Regulation	Limit	Form
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA: OSHA TWA: OSHA PEL: OSHA PEL: ACGIH TWA:	0.1 mg/m3 0.3 mg/m3 15 mg/m3 5 mg/m3 0.025 mg/m3	Respirable. Total dust. Total dust. Respirable fraction. Respirable fraction.
Toluene-2,6-Diisocyanate	91-08-7	ACGIH TWA: ACGIH STEL:	0.005 ppm 0.02 ppm	
2,4-Toluene diisocyanate	584-84-9	ACGIH TWA: ACGIH STEL:	0.005 ppm 0.02 ppm	
o-Cresol	95-48-7	ACGIH TWA: OSHA PEL:	5 ppm 22 mg/m3	

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form	: Non-sag gunnable paste
Color	: Limestone
Odor	: Petroleum Solvent
pH	: Not available.
Vapour pressure	: Not available.
Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: 280 °F, 138 °C
Water solubility	: Insoluble
Specific Gravity	: 1.1344
% Volatile Weight	: 6 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid	: Amines. Water or moisture and oxidizing agents. Alcohols. Strong acids. Strong bases.
Stability	: Material is stable under normal storage, handling, and use.
Hazardous polymerization	: Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Butyl benzyl phthalate, CAS-No.: 85-68-7	
Acute oral toxicity (LD-50 oral)	13,500 mg/kg ( Rat )
2,4-Toluene diisocyanate, CAS-No.: 584-84-9	
Acute oral toxicity (LD-50 oral)	5,800 mg/kg ( Rat )

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Acute inhalation toxicity (LC-50)	14 mg/l for 4 h ( Rat ) 10 mg/l for 4 h ( Mouse ) 13 mg/l for 4 h ( Guinea pig ) 11 mg/l for 4 h ( Rabbit )
o-Cresol, CAS-No.: 95-48-7	
Acute oral toxicity (LD-50 oral)	940 mg/kg ( Rabbit ) 1,800 mg/kg ( Rabbit ) 121 mg/kg ( Rat ) 344 mg/kg ( Mouse ) 1,350 mg/kg ( Rat )
Acute inhalation toxicity (LC-50)	0.179 mg/l for 2 h ( Mouse )
Acute dermal toxicity (LD-50 dermal)	620 mg/kg ( Rat ) 890 mg/kg ( Rabbit ) 620 mg/kg ( Mouse )

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Waste not regulated under RCRA. Dispose of in compliance with state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

TDG / DOT Shipping Description:  
NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION****North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

SARA 313 Components : None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard  
Chronic Health Hazard  
Fire Hazard

**OSHA Hazardous Components :**

Diisodecyl phthalate	26761-40-0
Calcium Carbonate (Limestone)	1317-65-3
Titanium dioxide	13463-67-7
Petroleum distillates	64742-47-8
Butyl benzyl phthalate	85-68-7
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
Toluene-2,6-Diisocyanate	91-08-7
2,4-Toluene diisocyanate	584-84-9
o-Cresol	95-48-7

OSHA Status: Considered : Irritant  
hazardous based on the Sensitizer

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following criteria: Carcinogen  
 OSHA Flammability : IIIA  
 Regulatory VOC (less water and exempt solvent) : 79 g/l  
 VOC Method 310 : 2 %

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:

Butyl benzyl phthalate 85-68-7  
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

**U.S. State Regulations:**

MASS RTK Components	:	Calcium Carbonate (Limestone)	1317-65-3
		Titanium dioxide	13463-67-7
		Petroleum distillates	64742-47-8
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Toluene-2,6-Diisocyanate	91-08-7
		2,4-Toluene diisocyanate	584-84-9
		o-Cresol	95-48-7
Penn RTK Components	:	Aromatic Polyisocyanate Resin	NJ TSRN# 51721300-5270P
		Diisodecyl phthalate	26761-40-0
		Calcium Carbonate (Limestone)	1317-65-3
		Tackifier	NJ TSRN# 51721300-5272P
		Thickener	NJ TSRN# 51721300-5300P
		Titanium dioxide	13463-67-7
		Petroleum distillates	64742-47-8
		2,4-Toluene diisocyanate	584-84-9
NJ RTK Components	:	Aromatic Polyisocyanate Resin	NJ TSRN# 51721300-5270P
		Diisodecyl phthalate	26761-40-0
		Calcium Carbonate (Limestone)	1317-65-3
		Tackifier	NJ TSRN# 51721300-5272P
		Thickener	NJ TSRN# 51721300-5300P
		Titanium dioxide	13463-67-7
		Petroleum distillates	64742-47-8
		Butyl benzyl phthalate	85-68-7
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

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

26761-40-0	Diisodecyl phthalate
85-68-7	Butyl benzyl phthalate
14808-60-7	Crystalline Silica (Quartz)/ Silica Sand
1333-86-4	Carbon Black
91-08-7	Toluene-2,6-Diisocyanate
584-84-9	2,4-Toluene diisocyanate
100-41-4	Ethylbenzene
108-88-3	Toluene

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**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	2
Reactivity	0
PPE	

0 = Minimum  
1 = Slight  
2 = Moderate  
3 = Serious  
4 = Severe

**Further 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 their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 DSL - Domestic Substance List  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound  
 WHMIS - Workplace Hazardous Materials Information System