

VULKEM 350NF-S/L 5 GAL PAILVersion 2.
REVISION DATE: 05/12/2010

Print Date 07/29/2010

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : VULKEM 350NF-S/L 5 GAL PAIL
Product code : 850712LV805

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 : Coating

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

Gray. Liquid. May cause drowsiness, weakness, and fatigue. Vapor and/or mist may irritate nose and throat. May cause moderate irritation to the respiratory system. May cause allergic respiratory sensitization. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : May cause drowsiness, weakness, and fatigue. Vapor and/or mist may irritate nose and throat. May cause moderate irritation to the respiratory system. May cause allergic respiratory sensitization.

Eyes : Vapor and/or mist may cause eye irritation.

Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.

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

Aggravated Medical Conditions

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

Chronic Health Effects

Overexposure may cause dermatitis, asthma, skin and respiratory sensitization and decreased lung function. Repeated overexposure to vapors and/or material may injure the liver, kidneys and respiratory system unless suitable engineering controls and/or personal protective equipment are used. 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. A long-term NTP study showed that oral exposure to toluene diisocyanate (TDI) caused cancer in rats and mice. A lifetime inhalation study sponsored by the International Isocyanate Institute did not show carcinogenic activity in rats. May cause allergic skin and respiratory sensitization. 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: Eye, Lung, Liver, Kidney, Skin, Nerve

VULKEM 350NF-S/L 5 GAL PAIL

Version 2.

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SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Polyurethane Polymer	NJ TSRN# 51721300-5024P	30.0 - 60.0
Calcium Carbonate (Limestone)	1317-65-3	30.0 - 60.0
Propylene carbonate	108-32-7	7.0 - 13.0
Tackifier	NJ TSRN# 51721300-5272P	7.0 - 13.0
Hydrotreated heavy naphtha	64742-48-9	3.0 - 7.0
Calcium oxide	1305-78-8	1.0 - 5.0
Titanium dioxide	13463-67-7	1.0 - 5.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	0.1 - 1.0
2,4-Toluene diisocyanate	584-84-9	0.1 - 1.0
Isophorone Diisocyanate	4098-71-9	0.5 - 1.5

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

- Inhalation : Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Wash area of contact thoroughly with hand cleaner followed by 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 : 167 F, 75 C
- Method : Setaflash Closed Cup
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- 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. Smoke, fumes. 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).
- Fire and explosion conditions : Closed container, may burst when exposed to extreme heat. This product not expected to ignite under normal conditions of use.

VULKEM 350NF-S/L 5 GAL PAIL

Version 2.
REVISION DATE: 05/12/2010

Print Date 07/29/2010

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal.

SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Change soiled work clothes frequently. Clean hands thoroughly after handling. Store under normal warehouse conditions in sealed containers.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Use full engineering controls before relying on personal protective equipment. Wear appropriate, properly fitted air purifying respirator with combination particulate filter and vapor/gas removing cartridge when airborne contaminant level(s) exceed exposure limits indicated on the MSDS, or product is spray applied.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

Exposure Limits

Chemical Name	CAS Number	Regulation	Limit	Form
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.
Calcium oxide	1305-78-8	ACGIH TWA:	2 mg/m3	Total dust. Respirable fraction.
		OSHA PEL:	5 mg/m3	
		OSHA TWA:	15 mg/m3	
		OSHA TWA:	5 mg/m3	
Titanium dioxide	13463-67-7	ACGIH TWA:	10 mg/m3	Total dust. Total dust. Respirable fraction.
		OSHA PEL:	15 mg/m3	
		OSHA TWA:	15 mg/m3	
		OSHA TWA:	5 mg/m3	

VULKEM 350NF-S/L 5 GAL PAIL

Version 2.

Print Date 07/29/2010

REVISION DATE: 05/12/2010

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA:	0.1 mg/m ³	Respirable.
		OSHA TWA:	0.3 mg/m ³	Total dust.
		OSHA PEL:	15 mg/m ³	Total dust.
		OSHA PEL:	5 mg/m ³	Respirable fraction.
		ACGIH TWA:	0.025 mg/m ³	Respirable fraction.
2,4-Toluene diisocyanate	584-84-9	ACGIH TWA:	0.005 ppm	
		ACGIH STEL:	0.02 ppm	
Isophorone Diisocyanate	4098-71-9	ACGIH TWA:	0.005 ppm	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	: Liquid
Color	: Gray
Odor	: Aliphatic 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	: Not available.
Water solubility	: Negligible
Specific Gravity	: 1.38
% Volatile Weight	: 7 %

SECTION 10 - REACTIVITY / STABILITY

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

SECTION 11 - TOXICOLOGICAL INFORMATION

2,4-Toluene diisocyanate, CAS-No.: 584-84-9

Acute oral toxicity (LD-50 oral)	5,800 mg/kg (Rat)
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)

Isophorone Diisocyanate, CAS-No.: 4098-71-9

Acute oral toxicity (LD-50 oral)	2,500 mg/kg (Mouse) 1,000 mg/kg (Rat)
Acute inhalation toxicity (LC-50)	0.033 mg/l for 4 h (Rat) 0.123 mg/l for 4 h (Rat)
Acute dermal toxicity (LD-50 dermal)	1,060 mg/kg (Rat)



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Version 2.
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SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste 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 : 2,4-Toluene diisocyanate 584-84-9

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

OSHA Hazardous Components :

Calcium Carbonate (Limestone)	1317-65-3
Calcium oxide	1305-78-8
Titanium dioxide	13463-67-7
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
2,4-Toluene diisocyanate	584-84-9
Isophorone Diisocyanate	4098-71-9

OSHA Status: Considered : Irritant
 hazardous based on the Sensitizer
 following criteria: Carcinogen

OSHA Flammability : IIIA

Regulatory VOC (less water and : 60 g/l
 exempt solvent)

VOC Method 310 : 7 %

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

Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

U.S. State Regulations:

VULKEM 350NF-S/L 5 GAL PAIL

Version 2.

Print Date 07/29/2010

REVISION DATE: 05/12/2010

MASS RTK Components	:	Calcium Carbonate (Limestone)	1317-65-3
		Calcium oxide	1305-78-8
		Titanium dioxide	13463-67-7
		Isophorone Diisocyanate	4098-71-9
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		2,4-Toluene diisocyanate	584-84-9
		Toluene-2,6-Diisocyanate	91-08-7
Penn RTK Components	:	Polyurethane Polymer	NJ TSRN# 51721300-5024P
		Calcium Carbonate (Limestone)	1317-65-3
		Propylene carbonate	108-32-7
		Tackifier	NJ TSRN# 51721300-5272P
		Hydrotreated heavy naphtha	64742-48-9
		Calcium oxide	1305-78-8
		Titanium dioxide	13463-67-7
		2,4-Toluene diisocyanate	584-84-9
NJ RTK Components	:	Polyurethane Polymer	NJ TSRN# 51721300-5024P
		Calcium Carbonate (Limestone)	1317-65-3
		Propylene carbonate	108-32-7
		Tackifier	NJ TSRN# 51721300-5272P
		Hydrotreated heavy naphtha	64742-48-9
		Calcium oxide	1305-78-8
		Titanium dioxide	13463-67-7
		Crystalline Silica (Quartz)/ Silica Sand	14808-60-7

Components under California Proposition 65:

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

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

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



VULKEM 350NF-S/L 5 GAL PAIL

Version 2.

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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

TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
V - Volume
VOC - Volatile Organic Compound
WHMIS - Workplace Hazardous Materials Information System