

**VULKEM 171 PRIMER**Version 1  
REVISION DATE: 01/24/2006

Print Date 08/17/2006

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : VULKEM 171 PRIMER  
Product code : 271171 817

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 : Primer

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

Clear. 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. Prolonged or repeated exposure to xylene may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, heart muscle sensitization and arrhythmia, hearing loss, and brain, liver, kidney damage. Xylene overexposure may affect fetal development. 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. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. 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.

**Target Organs:** Eye, Lung, Liver, Kidney, Skin, Nerve

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**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Aromatic Polyisocyanate Resin	NJ TSRN# 51721300-5295P	40.0 - 70.0
Aromatic petroleum distillates	64742-95-6	15.0 - 40.0
1,2,4-Trimethylbenzene	95-63-6	10.0 - 30.0
Xylene	1330-20-7	10.0 - 30.0
1,3,5-Trimethylbenzene	108-67-8	5.0 - 10.0
Ethylbenzene	100-41-4	1.0 - 5.0
1,2,3-Trimethylbenzene	526-73-8	1.0 - 5.0
Toluene-2,6-Diisocyanate	91-08-7	- <1.0
2,4-Toluene diisocyanate	584-84-9	- <1.0

**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 : 94 °F, 34 °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 : Product may ignite if heated in excess of its flash point. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors. Vapors may travel to sources of ignition and flashback.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

**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. Do not smoke, weld, generate sparks, or use flame near container. To prevent generation of static discharges, use bonding/grounding connection when pouring liquid. Extinguish all ignition sources including pilot lights, non-explosion proof motors and electrical equipment until vapors dissipate. Store under dry warehouse conditions away from heat and all ignition sources.

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

- Respiratory protection : Use self-contained breathing apparatus (SCBA) or positive pressure air supplied respirator with full face mask to reduce exposure to isocyanate vapors below the exposure limits on the MSDS.
- 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**

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Regulation</b>	<b>Limit</b>	<b>Form</b>
1,2,4-Trimethylbenzene	95-63-6	ACGIH TWA:	25 ppm	
Xylene	1330-20-7	ACGIH TWA: ACGIH STEL: OSHA PEL:	100 ppm 150 ppm 435 mg/m <sup>3</sup>	
1,3,5-Trimethylbenzene	108-67-8	ACGIH TWA:	25 ppm	
Ethylbenzene	100-41-4	ACGIH TWA: ACGIH STEL: OSHA PEL:	100 ppm 125 ppm 435 mg/m <sup>3</sup>	
1,2,3-Trimethylbenzene	526-73-8	ACGIH TWA:	25 ppm	

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<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
2,4-Toluene diisocyanate	584-84-9	ACGIH TWA: ACGIH STEL:	0.005 ppm 0.02 ppm	
Toluene-2,6-Diisocyanate	91-08-7	ACGIH TWA: ACGIH STEL:	0.005 ppm 0.02 ppm	

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form	: Liquid
Color	: Clear
Odor	: Solvent odor
pH	: Not available.
Vapour pressure	: Not available.
Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: > 250 °F, > 121 °C
Water solubility	: Negligible
Specific Gravity	: 0.96
% Volatile Weight	: 57 %

**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**

Xylene, CAS-No.: 1330-20-7	
Acute oral toxicity (LD-50 oral)	3,523 - 8,600 mg/kg ( Rat )
Acute inhalation toxicity (LC-50)	6,350 mg/l ( Rat )
Ethylbenzene, CAS-No.: 100-41-4	
Acute oral toxicity (LD-50 oral)	3,500 mg/kg ( Rat )
Acute dermal toxicity (LD-50 dermal)	17,800 mg/kg ( Rabbit )
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 ( Rat )

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**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

RCRA Class : D001: Reportable Quantity = 100 lbs. (Characteristic of ignitability)

This classification applies only to the material as it was originally produced.

Disposal Method : Subject to hazardous waste treatment, storage and disposal requirements under RCRA. Dispose of in a contained chemical landfill in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA****TDG / DOT Shipping Description:**

ADHESIVES, 3, UN1133, PG III

**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	:	1,2,4-Trimethylbenzene	95-63-6
		Xylene	1330-20-7
		Ethylbenzene	100-41-4
		Toluene-2,6-Diisocyanate	91-08-7
		2,4-Toluene diisocyanate	584-84-9

SARA 311/312 Hazards	:	Acute Health Hazard
		Fire Hazard

**OSHA Hazardous Components :**

1,2,4-Trimethylbenzene	95-63-6
Xylene	1330-20-7
1,3,5-Trimethylbenzene	108-67-8
Ethylbenzene	100-41-4
1,2,3-Trimethylbenzene	526-73-8
2,4-Toluene diisocyanate	584-84-9
Toluene-2,6-Diisocyanate	91-08-7

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

OSHA Flammability	:	IC
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Regulatory VOC (less water and exempt solvent) : 554 g/l

VOC Method 310 : 57 %

**U.S. State Regulations:**

MASS RTK Components	:	1,2,4-Trimethylbenzene	95-63-6
		Xylene	1330-20-7
		1,3,5-Trimethylbenzene	108-67-8
		Ethylbenzene	100-41-4
		1,2,3-Trimethylbenzene	526-73-8
Penn RTK Components	:	Aromatic Polyisocyanate Resin	NJ TSRN# 51721300-5295P
		Aromatic petroleum distillates	64742-95-6
		1,2,4-Trimethylbenzene	95-63-6
		Xylene	1330-20-7
		1,3,5-Trimethylbenzene	108-67-8
		Ethylbenzene	100-41-4
		1,2,3-Trimethylbenzene	526-73-8
NJ RTK Components	:	Aromatic Polyisocyanate Resin	NJ TSRN# 51721300-5295P
		Aromatic petroleum distillates	64742-95-6
		1,2,4-Trimethylbenzene	95-63-6
		Xylene	1330-20-7
		1,3,5-Trimethylbenzene	108-67-8
		Ethylbenzene	100-41-4

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:

100-41-4	Ethylbenzene
108-88-3	Toluene
91-08-7	Toluene-2,6-Diisocyanate
584-84-9	2,4-Toluene diisocyanate
71-43-2	Benzene

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	3
Flammability	3
Reactivity	1
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

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act



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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

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