

VULKEM 116 BRONZEVersion 3.
REVISION DATE: 12/20/2011

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SECTION 1 - PRODUCT IDENTIFICATION / PREPARATION INFORMATION**Product Information**Trade name : VULKEM 116 BRONZE
Product code : 426719 323Supplier : Tremco Canada division
220 Wicksteed Avenue
Toronto, ON M4H 1G7Telephone : (416) 421-3300
Emergency Phone: : (613) 996-6666

Product use : Sealant

Preparation InformationPrepared by: : Sewnauth Raghunandan
Date: : 12/20/2011
Telephone : (416) 421-3300**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Bronze. 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 EntryInhalation : 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. Carbon black is classified by IARC to be a known animal carcinogen and a possible human carcinogen (Group 2B). Carbon black is encapsulated by resin and not expected to have adverse effects unless made airborne. 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

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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 : HAZARDOUS INGREDIENTS

Chemical Name	CAS-No.	Weight % Range
Heavy aromatic naphtha	64742-94-5	1.0 - 5.0
Iron oxide	1309-37-1	1.0 - 5.0
Adhesion Promoter	NJ ZTSRN# 51721300-5355P	1.0 - 5.0
Petroleum distillates	64742-47-8	1.0 - 5.0
4,4'-Methylene bis(phenylisocyanate)	101-68-8	0.5 - 1.5
1,2,4-Trimethylbenzene	95-63-6	0.1 - 1.0
Titanium dioxide	13463-67-7	0.1 - 1.0
Carbon Black	1333-86-4	0.1 - 1.0
Talc	14807-96-6	0.1 - 1.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	0.1 - 1.0
1,3,5-Trimethylbenzene	108-67-8	0.1 - 1.0

The ingredients listed above are hazardous as defined in the controlled products regulation. (CPR).

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 / EXPLOSION HAZARDS

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).



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SECTION 6 - SPILLS / LEAKS / ACCIDENTAL RELEASE MEASURES

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

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 - PREVENTIVE MEASURES/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

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Iron oxide	1309-37-1	Ontario TWAEV: ACGIH TWA: Ontario TWAEV: ACGIH TWA:	5 mg/m3 5 mg/m3 5 mg/m3 5 mg/m3	Dust and fume.as Fe Respirable fraction. Respirable. Respirable fraction.
Petroleum distillates	64742-47-8	Ontario TWAEV: Ontario TWAEV: ACGIH TWA: hydrocarbon vapor ACGIH TWA: hydrocarbon vapor	525 mg/m3 200 mg/m3 200 mg/m3 200 mg/m3	as total hydrocarbon vapor Non-aerosolas total Non-aerosolas total
4,4'-Methylene bis(phenylisocyanate)	101-68-8	Ontario TWAEV: ACGIH TWA:	0.005 ppm 0.005 ppm	

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Chemical Name	CAS Number	Regulation	Limit	Form
1,2,4-Trimethylbenzene	95-63-6	Ontario TWAEV: ACGIH TWA:	123 mg/m ³ 25 ppm	
Titanium dioxide	13463-67-7	Ontario TWAEV: ACGIH TWA:	10 mg/m ³ 10 mg/m ³	Total dust.
Carbon Black	1333-86-4	Ontario TWAEV: ACGIH TWA:	3.5 mg/m ³ 3.5 mg/m ³	
Talc	14807-96-6	Ontario TWAEV: ACGIH TWA: Ontario TWAEV:	2 mg/m ³ 2 mg/m ³ 2 ppm	Respirable. Respirable fraction.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	Ontario TWAEV: ACGIH TWA:	0.10 mg/m ³ 0.025 mg/m ³	Respirable fraction. Respirable fraction.
1,3,5-Trimethylbenzene	108-67-8	Ontario TWAEV: ACGIH TWA:	123 mg/m ³ 25 ppm	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Liquid (paste)
Form	: Non-sag gunnable paste
Color	: Bronze
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
Evaporation Rate:	: Not available.
Specific Gravity	: 1.1344
% Volatile Weight	: 7 %

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.



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SECTION 11 - TOXICOLOGICAL INFORMATION

4,4'-Methylene bis(phenylisocyanate), CAS-No.: 101-68-8
Acute inhalation toxicity (LC-50) 0.369 mg/l for 4 h (Rat) 0.38 mg/l for 4 h (Rat)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Disposal Method : Dispose as hazardous waste according to all local, state, federal and provincial 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.

Canadian Regulations:

WHMIS Classification : D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Other Regulations:

Regulatory VOC (less water and exempt solvent) : 83 g/l

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	2
Reactivity	0
PPE	

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



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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: Sewnauth Raghunandan

Legend

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|---|--|
| ACGIH - American Conference of Governmental Hygienists | OSHA - Occupational Safety and Health Administration |
| DOT - Department of Transportation | PEL - Permissible Exposure Limit |
| DSL - Domestic Substance List | RCRA - Resource Conservation and Recovery Act |
| EPA - Environmental Protection Agency | STEL - Short Term Exposure Limit |
| HMIS - Hazardous Materials Information System | TLV - Threshold Limit Value |
| IARC - International Agency for Research on Cancer | TSCA - Toxic Substances Control Act |
| MSHA - Mine Safety Health Administration | TWA - Time Weighted Average |
| NDSL - Non-Domestic Substance List | V - Volume |
| NIOSH - National Institute for Occupational Safety and Health | VOC - Volatile Organic Compound |
| NTP - National Toxicology Program | WHMIS - Workplace Hazardous Materials Information System |