

# Vulkem EWS

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## Vulkem BC 370 - 6 GAL

Version 2.0  
REVISION DATE: 07/25/2014

Print Date 10/16/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem BC 370 - 6 GAL**

Product code : 470370 805

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

Ivory. 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. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

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

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Methyl methacrylate	80-62-6	30.0 - 60.0
Barium sulfate	7727-43-7	30.0 - 60.0
Urethane methacrylate	NJ TSRN# 51721300-6492P	30.0 - 60.0

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Polymethylmethacrylate	25608-33-7	3.0 - 7.0
Iron oxide	1317-61-9	1.0 - 5.0

### 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                           | : | 11.5 °C, 54 °F  |
| Method                                | : | Closed Cup  |
| Lower explosion limit                 | : | 2.1 %(V) Solvent  |
| Upper explosion limit                 | : | 12.5 %(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. 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. |

### 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.



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**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Select positive pressure supplied air respirator (TC19C or equivalent) for isocyanates.
- 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
Methyl methacrylate	80-62-6	ACGIH TWA: ACGIH STEL: OSHA PEL:	50 ppm 100 ppm 410 mg/m3	
Barium sulfate	7727-43-7	ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	10 mg/m3 5 mg/m3 15 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Total dust. Respirable fraction.
Iron oxide	1317-61-9	ACGIH TWA: ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3 15 mg/m3 5 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction. Total dust. Respirable fraction.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid
- Color : Ivory
- Odor : Acrylic
- pH : Not available.
- Vapour pressure : Not available.

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Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: 100.3 °C, 212 °F
Water solubility	: Negligible
Specific Gravity	: 1.3
% Volatile Weight	: 0 %

### 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

Methyl methacrylate, CAS-No.: 80-62-6	
Acute oral toxicity (LD-50 oral)	9,400 mg/kg ( Rat ) 7,800 mg/kg ( Rat ) 6,000 mg/kg ( Rabbit )
Acute inhalation toxicity (LC-50)	3,750 mg/l for 8 h ( Rat ) 18.5 mg/l for 2 h ( Mouse )

### 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. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

### SECTION 14 - TRANSPORTATION / SHIPPING DATA

#### CFR / DOT:

UN1866, Resin solution, 3, PG II

#### TDG:

UN1866, RESIN SOLUTION, 3, PG II

#### IMDG:



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UN1866, RESIN SOLUTION, 3, PG II

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory. One or more components are not listed on the DSL or NDSL.

**U.S. Federal Regulations:**

SARA 313 Components : Methyl methacrylate 80-62-6

SARA 311/312 Hazards : Acute Health Hazard  
 Fire Hazard

OSHA Hazardous Components :

Methyl methacrylate 80-62-6  
 Barium sulfate 7727-43-7  
 Iron oxide 1317-61-9

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

OSHA Flammability : IB

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0.00 %

**U.S. State Regulations:**

MASS RTK Components : Methyl methacrylate 80-62-6  
 Barium sulfate 7727-43-7

Penn RTK Components : Methyl methacrylate 80-62-6  
 Barium sulfate 7727-43-7  
 Urethane methacrylate NJ TSRN# 51721300-6492P  
 Polymethylmethacrylate 25608-33-7

NJ RTK Components : Methyl methacrylate 80-62-6  
 Barium sulfate 7727-43-7  
 Urethane methacrylate NJ TSRN# 51721300-6492P  
 Polymethylmethacrylate 25608-33-7  
 Iron oxide 1317-61-9



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Components under California Proposition 65:  
 None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	3
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

## Vulkem BC 371 - 6 GAL

Version 2.0  
REVISION DATE: 07/25/2014

Print Date 10/16/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem BC 371 - 6 GAL**

Product code : 470371 805

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

Grey. 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. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

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

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Urethane methacrylate	NJ TSRN# 51721300-6492P	30.0 - 60.0
Barium sulfate	7727-43-7	30.0 - 60.0
Methyl methacrylate	80-62-6	15.0 - 40.0

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Polymethylmethacrylate	25608-33-7	3.0 - 7.0
Iron oxide	1317-61-9	1.0 - 5.0

### 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                           | : | 11.5 °C, 54 °F  |
| Method                                | : | Closed Cup  |
| Lower explosion limit                 | : | 2.1 %(V) Solvent  |
| Upper explosion limit                 | : | 12.5 %(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. 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. |

### 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.



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**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Select positive pressure supplied air respirator (TC19C or equivalent) for isocyanates.
- 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
Barium sulfate	7727-43-7	ACGIH TWA:	10 mg/m3	
		OSHA PEL:	5 mg/m3	Respirable fraction.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
Methyl methacrylate	80-62-6	ACGIH TWA:	50 ppm	
		ACGIH STEL:	100 ppm	
		OSHA PEL:	410 mg/m3	
Iron oxide	1317-61-9	ACGIH TWA:	3 mg/m3	Respirable particles.
		ACGIH TWA:	10 mg/m3	Inhalable particles.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid
- Color : Grey
- Odor : Acrylic
- pH : Not available.
- Vapour pressure : Not available.



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Vapor density : Heavier than air  
 Melting point/range : Not available.  
 Freezing point : Not available.  
 Boiling point/range : Not available.  
 Water solubility : Negligible  
 Specific Gravity : 1.23  
 % Volatile Weight : 0 %

**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**

Methyl methacrylate, CAS-No.: 80-62-6  
 Acute oral toxicity (LD-50 oral) 9,400 mg/kg ( Rat ) 7,800 mg/kg ( Rat ) 6,000 mg/kg ( Rabbit )  
 Acute inhalation toxicity (LC-50) 3,750 mg/l for 8 h ( Rat ) 18.5 mg/l for 2 h ( Mouse )

**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. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**CFR / DOT:**

UN1866, Resin solution, 3, PG II

**TDG:**

UN1866, RESIN SOLUTION, 3, PG II

**IMDG:**



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UN1866, RESIN SOLUTION, 3, PG II

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory. One or more components are not listed on the DSL or NDSL.

**U.S. Federal Regulations:**

SARA 313 Components : Methyl methacrylate 80-62-6

SARA 311/312 Hazards : Acute Health Hazard  
 Fire Hazard

OSHA Hazardous Components :

Barium sulfate 7727-43-7  
 Methyl methacrylate 80-62-6  
 Iron oxide 1317-61-9

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

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0.00 %

**U.S. State Regulations:**

MASS RTK Components : Barium sulfate 7727-43-7  
 Methyl methacrylate 80-62-6

Penn RTK Components : Urethane methacrylate NJ TSRN# 51721300-6492P  
 Barium sulfate 7727-43-7  
 Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7

NJ RTK Components : Urethane methacrylate NJ TSRN# 51721300-6492P  
 Barium sulfate 7727-43-7  
 Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7  
 Iron oxide 1317-61-9



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Components under California Proposition 65:  
 None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	3
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

## Vulkem BC 372 - 6 GAL

Version 1.0  
REVISION DATE: 07/18/2014

Print Date 10/16/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem BC 372 - 6 GAL**

Product code : 470372 805

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

Beige. Gel. May cause moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. 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 moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue.

Eyes : Vapor and/or mist may cause eye irritation. Direct contact may cause temporary redness and discomfort.

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

Skin : May cause moderate irritation.

#### Aggravated Medical Conditions

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

#### Chronic Health Effects

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.

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

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Urethane methacrylate	NJ TSRN# 51721300-6492P	15.0 - 40.0
Methyl methacrylate	80-62-6	15.0 - 40.0
Fire retardant	NJ TSRN# 51721300-5035P	15.0 - 40.0

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Barium sulfate	7727-43-7	15.0 - 40.0
Polymethylmethacrylate	25608-33-7	3.0 - 7.0
Silicon dioxide, amorphous	NJ TSN# 51721300-5168P	3.0 - 7.0

### 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	:	11.5 °C, 54 °F
Method	:	Setaflash Closed Cup
Lower explosion limit	:	2.1 %(V) Solvent
Upper explosion limit	:	12.5 %(V) Solvent
Autoignition temperature	:	Not available.
Extinguishing media	:	If water fog is ineffective, use carbon dioxide, dry chemical or foam.
Hazardous combustion products	:	Smoke, fumes. Carbon monoxide and carbon dioxide can form. Nitrogen oxides can form.
Protective equipment for firefighters	:	Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimize pressure build-up.
Fire and explosion conditions	:	Vapor concentrations in enclosed areas may ignite explosively. Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors.

### 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. To prevent generation of static discharges, use bonding/grounding connection when pouring liquid. Extinguish all ignition sources including pilot lights, non-

## Vulkem BC 372 - 6 GAL

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explosion proof motors and electrical equipment until vapors dissipate. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. 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. Store in sealed containers in a cool, dry, ventilated warehouse location.

### 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. 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.
- Protective measures : Use professional judgment in the selection, care, and use. Inspect and replace equipment at regular intervals.
- 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
Methyl methacrylate	80-62-6	ACGIH TWA: ACGIH STEL: OSHA PEL:	50 ppm 100 ppm 410 mg/m3	
Fire retardant	NJ TSRN# 51721300-5035P	ACGIH TWA:	1 mg/m3	Respirable fraction.
Barium sulfate	7727-43-7	ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA: OSHA TWA:	10 mg/m3 5 mg/m3 15 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Total dust. Total dust. Respirable fraction.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Gel
- Color : Beige
- Odor : Acrylic
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Heavier than air



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Melting point/range : Not available.  
 Freezing point : Not available.  
 Boiling point/range : Not available.  
 Water solubility : Negligible  
 Specific Gravity : 1.36  
 % Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Oxidizing agents.Strong acids.Strong bases.  
 Stability : Stable under normal conditions. Avoid welding arcs, flames or other high temperature sources.  
 Hazardous polymerization : Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Methyl methacrylate, CAS-No.: 80-62-6  
 Acute oral toxicity (LD-50 oral) 9,400 mg/kg ( Rat ) 7,800 mg/kg ( Rat ) 6,000 mg/kg ( Rabbit )  
 Acute inhalation toxicity (LC-50) 3,750 mg/l for 8 h ( Rat ) 18.5 mg/l for 2 h ( Mouse )  
 Aluminum hydroxide, CAS-No.: 21645-51-2  
 Acute oral toxicity (LD-50 oral) 5,000 mg/kg ( Rat )

**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. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**CFR / DOT:**

UN1866, Resin solution, 3, PG II

**TDG:**



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UN1866, RESIN SOLUTION, 3, PG II

**IMDG:**

UN1866, RESIN SOLUTION, 3, PG II

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory. One or more components are not listed on the DSL or NDSL.

**U.S. Federal Regulations:**

SARA 313 Components : Methyl methacrylate 80-62-6

SARA 311/312 Hazards : Fire Hazard

OSHA Hazardous Components :

Methyl methacrylate 80-62-6  
 Fire retardant NJ TSRN# 51721300-5035P  
 Barium sulfate 7727-43-7

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0.00 %

**U.S. State Regulations:**

MASS RTK Components : Methyl methacrylate 80-62-6  
 Barium sulfate 7727-43-7  
 Silicon dioxide, amorphous NJ TSRN# 51721300-5168P

Penn RTK Components : Urethane methacrylate NJ TSRN# 51721300-6492P  
 Methyl methacrylate 80-62-6  
 Fire retardant NJ TSRN# 51721300-5035P  
 Barium sulfate 7727-43-7  
 Polymethylmethacrylate 25608-33-7  
 Silicon dioxide, amorphous NJ TSRN# 51721300-5168P

NJ RTK Components : Urethane methacrylate NJ TSRN# 51721300-6492P  
 Methyl methacrylate 80-62-6  
 Fire retardant NJ TSRN# 51721300-5035P  
 Barium sulfate 7727-43-7



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Polymethylmethacrylate  
 Silicon dioxide, amorphous

25608-33-7  
 NJ TSRN# 51721300-5168P

Components under California Proposition 65:  
 None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
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 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

## SAFETY DATA SHEET

### 1. Identification

**Material name:** Vulkem EWS Cleaner - 6 GAL  
**Material:** 470080 805

**Recommended use and restriction on use**

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

Tremco U.S Sealants  
3735 Green Road  
Beachwood OH 44122  
US

**Contact person:** EH&S Department  
**Telephone:** 216-292-5000  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

### 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable liquids Category 2

**Health Hazards**

Serious Eye Damage/Eye Irritation Category 2A  
Skin sensitizer Category 1

**Unknown toxicity - Health**

Acute toxicity, oral 0 %  
Acute toxicity, dermal 0 %  
Acute toxicity, inhalation, vapor 0 %  
Acute toxicity, inhalation, dust or mist 100 %

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment 0 %  
Chronic hazards to the aquatic environment 100 %

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

<b>Hazard Statement:</b>	Highly flammable liquid and vapor. Causes serious eye irritation. May cause an allergic skin reaction.
<b>Precautionary Statement:</b>	
<b>Prevention:</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.
<b>Response:</b>	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see this label). Wash contaminated clothing before reuse. In case of fire: Use ... to extinguish.
<b>Storage:</b>	Store in well-ventilated place. Keep cool.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Other hazards which do not result in GHS classification:</b>	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

<b>3. Composition/information on ingredients</b>
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**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Methyl methacrylate	80-62-6	60 - 100%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

<b>4. First-aid measures</b>
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<b>Ingestion:</b>	Rinse mouth thoroughly.
<b>Inhalation:</b>	Move to fresh air.
<b>Skin Contact:</b>	Get medical attention if symptoms occur. Take off immediately all contaminated clothing. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Respiratory tract irritation.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Get medical attention if symptoms occur.

## 5. Fire-fighting measures

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Avoid water in straight hose stream; will scatter and spread fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

## 7. Handling and storage

**Precautions for safe handling:** Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:** Store in a well-ventilated place. Store in a cool place.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2011)
	PEL	100 ppm      410 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methyl methacrylate	TWAEV	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Methyl methacrylate	TWA	50 ppm      205 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**Appropriate Engineering Controls**      Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

- General information:**      Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof ventilation equipment.
- Eye/face protection:**      Wear safety glasses with side shields (or goggles).
- Skin Protection**
  - Hand Protection:**      Use suitable protective gloves if risk of skin contact.
  - Other:**      Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
- Respiratory Protection:**      In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
- Hygiene measures:**      Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

**9. Physical and chemical properties**

**Appearance**

- Physical state:**      liquid
- Form:**      liquid
- Color:**      Colorless
- Odor:**      Mild petroleum/solvent
- Odor threshold:**      No data available.
- pH:**      No data available.
- Melting point/freezing point:**      No data available.
- Initial boiling point and boiling range:**      100.3 °C 212.5 °F
- Flash Point:**      11.5 °C 52.7 °F(Closed Cup)
- Evaporation rate:**      Slower than Ether
- Flammability (solid, gas):**      No
- Upper/lower limit on flammability or explosive limits**
  - Flammability limit - upper (%):**      12.5 %(V)
  - Flammability limit - lower (%):**      2.1 %(V)
  - Explosive limit - upper (%):**      No data available.
  - Explosive limit - lower (%):**      No data available.
- Vapor pressure:**      No data available.
- Vapor density:**      Vapors are heavier than air and may travel along the floor and

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	in the bottom of containers.
<b>Relative density:</b>	0.94
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Heat, sparks, flames.
<b>Incompatible Materials:</b>	Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.
<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral</b>	
<b>Product:</b>	No data available.
<b>Dermal</b>	
<b>Product:</b>	No data available.
<b>Inhalation</b>	
<b>Product:</b>	No data available.

**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Specified substance(s):**

Methyl methacrylate in vivo (Rabbit): Experimental result, Weight of Evidence study

**Serious Eye Damage/Eye Irritation****Product:** No data available.**Specified substance(s):**

Methyl methacrylate Irritating

**Respiratory or Skin Sensitization****Product:** No data available.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.

**Aspiration Hazard****Product:** No data available.**Other effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Methyl methacrylate LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 410 mg/l Mortality**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Methyl methacrylate LC 50 (Water flea (*Daphnia magna*), 24 h): 1,760 mg/l Mortality**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Methyl methacrylate NOAEL (Danio rerio, 35 d): 9.4 mg/l Experimental result, Key study  
LOAEL (Danio rerio, 35 d): 18.8 mg/l Experimental result, Key study  
LC 50 (Danio rerio, 35 d): 33.7 mg/l Experimental result, Key study**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**  
**Product:** No data available.

**Specified substance(s):**  
Methyl methacrylate Log Kow: 1.38

**Mobility in Soil:** No data available.

**Other Adverse Effects:** No data available.

### 13. Disposal considerations

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

### 14. Transport information

**TDG:**

UN1247, METHYL METHACRYLATE MONOMER, STABILIZED, 3, PG II

**CFR / DOT:**

UN1247, Methyl methacrylate monomer, stabilized, 3, PG II

**IMDG:**

UN1247, METHYL METHACRYLATE MONOMER, STABILIZED, 3, PG II

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methyl methacrylate	1000 lbs.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

### Hazard categories

Fire Hazard  
Immediate (Acute) Health Hazards

### SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

### SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methyl methacrylate	1000 lbs.

### SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Methyl methacrylate	500 lbs

### SARA 313 (TRI Reporting)

<u>Chemical Identity</u>
Methyl methacrylate

## Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

## Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

## US State Regulations

### US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

### US. New Jersey Worker and Community Right-to-Know Act

<u>Chemical Identity</u>
Methyl methacrylate

### US. Massachusetts RTK - Substance List

<u>Chemical Identity</u>
Methyl methacrylate

### US. Pennsylvania RTK - Hazardous Substances

<u>Chemical Identity</u>
Methyl methacrylate

### US. Rhode Island RTK

<u>Chemical Identity</u>
Methyl methacrylate

## Other Regulations:

Regulatory VOC (less water and exempt solvent):	0 g/l
VOC Method 310:	0.00 %

## Inventory Status:

00000020547

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Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	All components in this product are listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	All components in this product are listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision****Revision Date:** 07/22/2016**Version #:** 1.1**Further Information:** No data available.**Disclaimer:** 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.



**Vulkem EWS Filler Powder - 55LB Bag**

 Version 1.0  
 REVISION DATE: 07/21/2014

Print Date 10/16/2014

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : **Vulkem EWS Filler Powder - 55LB Bag**

Product code : 470100 501

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

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

Off-White. Powder. May cause coughing and wheezing. Dust may irritate respiratory tract. 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 coughing and wheezing. Dust may irritate respiratory tract.  
 Eyes : Dust may cause eye irritation. May cause mechanical irritation or abrasion. Direct contact may cause temporary redness and discomfort.  
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause mild irritation.

**Aggravated Medical Conditions**

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

**Chronic Health 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.

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	> 60.0

**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.

Eye contact : Flush with water for 15 minutes. If irritation persists, get medical attention.

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- 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 : Not available.
- Method : Not available.
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : This product is not expected to burn under normal conditions of use. Use that which is appropriate to the surroundings.
- Hazardous combustion products : Not available.
- Protective equipment for firefighters : Not applicable. Product is not expected to burn.
- Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water.

### SECTION 7 - HANDLING AND STORAGE

Store under normal warehouse conditions in sealed containers. Handle in compliance with common hygienic practices. Clean hands thoroughly after handling.

### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Personal protection equipment

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection.
- Skin and body protection : Prevent contact with shoes and clothing. Use rubber apron and overshoes.
- 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



**Vulkem EWS Filler Powder - 55LB Bag**

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<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/m3	Respirable.
		OSHA TWA:	0.3 mg/m3	Total dust.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	0.025 mg/m3	Respirable fraction.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form : Powder  
 Color : Off-White  
 Odor : None  
 pH : Not available.  
 Vapour pressure : Not available.  
 Vapor density : Not available.  
 Melting point/range : Not available.  
 Freezing point : Not available.  
 Boiling point/range : Not available.  
 Water solubility : Not available.  
 Specific Gravity : 1.4  
 % Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Not Applicable.  
 Stability : Material is stable under normal storage, handling, and use.  
 Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

No Data Available

**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.



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**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**CFR / DOT:**

Not Regulated

**TDG:**

Not Regulated

**IMDG:**

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

OSHA Hazardous Components :

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

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

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 0 g/l  
exempt solvent)

VOC Method 310 : 0.00 %

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

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

**U.S. State Regulations:**

MASS RTK Components : Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

Penn RTK Components : Crystalline Silica (Quartz)/ Silica Sand 14808-60-7



**Vulkem EWS Filler Powder - 55LB Bag**

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NJ RTK Components : 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	1
Flammability	0
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

## Vulkem EWS Initiator - 55LB Pail

Version 1.0  
REVISION DATE: 07/25/2014

Print Date 10/16/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem EWS Initiator - 55LB Pail**

Product code : 470060 805

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

### SECTION 2 - HAZARDS IDENTIFICATION

#### Emergency Overview

White. Powder. May cause coughing and wheezing. Dust may irritate respiratory tract. 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 coughing and wheezing. Dust may irritate respiratory tract.  
Eyes : Dust may cause eye irritation. May cause mechanical irritation or abrasion. Direct contact may cause temporary redness and discomfort.  
Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.  
Skin : May cause mild irritation.

#### Aggravated Medical Conditions

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

#### Chronic Health 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. Prolonged inhalation of mica airborne dust can produce scar tissue in the lungs. Mica is a filler that is encapsulated by resin and is not expected to have adverse effects unless made airborne.

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Dibenzoyl Peroxide	94-36-0	15.0 - 40.0
Dicyclohexyl phthalate	84-61-7	15.0 - 40.0
Mica	12001-26-2	15.0 - 40.0
Chlorite	1318-59-8	15.0 - 40.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	15.0 - 40.0

## Vulkem EWS Initiator - 55LB Pail

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### 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.                                  |
| Eye contact  | : | Flush with water for 15 minutes. If irritation persists, get medical attention.   |
| 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                           | : | Not available.  |
| Method                                | : | Not applicable.   |
| Lower explosion limit                 | : | Not available.  |
| Upper explosion limit                 | : | Not available.  |
| Autoignition temperature              | : | Not available.  |
| Extinguishing media                   | : | Water spray, foam, dry powder, carbon dioxide.  |
| Hazardous combustion products         | : | Not available.  |
| Protective equipment for firefighters | : | Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). |
| Fire and explosion conditions         | : | This product not expected to ignite under normal conditions of use.   |

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water.

### SECTION 7 - HANDLING AND STORAGE

Store under normal warehouse conditions below 120F/49C. Prevent inhalation of dust and contact with skin and eyes. Clean hands thoroughly after handling. Handle in compliance with common hygienic practices. Clean hands thoroughly after handling.

### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Personal protection equipment

- |                        |   |  |
|------------------------|---|--|
| Respiratory protection | : | Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use. |
| Hand protection        | : | Use suitable impervious rubber or vinyl gloves and protective apparel to   |



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- reduce exposure.
- Eye protection : Wear appropriate eye protection.
- Skin and body protection : Prevent contact with shoes and clothing. Use rubber apron and overshoes.
- 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
Mica	12001-26-2	ACGIH TWA:	3 mg/m3	Respirable fraction.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA:	0.1 mg/m3	Respirable.
		OSHA TWA:	0.3 mg/m3	Total dust.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	0.025 mg/m3	Respirable fraction.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Powder
- Color : White
- Odor : Mild
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Not available.
- Melting point/range : Not available.
- Freezing point : Not available.
- Boiling point/range : Not available.
- Water solubility : Not available.
- Specific Gravity : 0.9
- % Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

- Substances to avoid : Lithium and other metals. Acids and bases. Iron, rust
- Stability : Material is stable under normal storage, handling, and use.
- Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

No Data Available



**Vulkem EWS Initiator - 55LB Pail**

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**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**

**CFR / DOT:**

Not Regulated

**TDG:**

Not Regulated

**IMDG:**

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 : Dibenzoyl Peroxide 94-36-0

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

OSHA Hazardous Components :

Dibenzoyl Peroxide 94-36-0  
Mica 12001-26-2  
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

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

OSHA Flammability : Not Regulated



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Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0.00 %

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

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

**U.S. State Regulations:**

MASS RTK Components : Dibenzoyl Peroxide 94-36-0  
 Mica 12001-26-2  
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

Penn RTK Components : Dibenzoyl Peroxide 94-36-0  
 Dicyclohexyl phthalate 84-61-7  
 Mica 12001-26-2  
 Chlorite 1318-59-8  
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

NJ RTK Components : Dibenzoyl Peroxide 94-36-0  
 Dicyclohexyl phthalate 84-61-7  
 Mica 12001-26-2  
 Chlorite 1318-59-8  
 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	1
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 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 EWS Initiator - 55LB Pail**

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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

## Vulkem Primer #70 - 6 GAL

Version 1.0  
REVISION DATE: 07/09/2014

Print Date 10/17/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem Primer #70 - 6 GAL**

Product code : 470070 805

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

Colorless. Liquid. May cause moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. 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 moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue.

Eyes : Vapor and/or mist may cause eye irritation. Direct contact may cause temporary redness and discomfort.

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

Skin : May cause moderate irritation.

#### Aggravated Medical Conditions

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

#### Chronic Health Effects

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.

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

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Methyl methacrylate	80-62-6	> 60.0
Polymethylmethacrylate	25608-33-7	30.0 - 60.0
Ethylene glycol dimethacrylate	97-90-5	1.0 - 5.0

## Vulkem Primer #70 - 6 GAL

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Paraffin

64742-51-4

1.0 - 5.0

### 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                           | : | 11.5 °C, 54 °F   |
| Method                                | : | Not available.   |
| Lower explosion limit                 | : | 2.1 %(V) Solvent   |
| Upper explosion limit                 | : | 12.5 %(V) Solvent  |
| Autoignition temperature              | : | Not available.   |
| Extinguishing media                   | : | If water fog is ineffective, use carbon dioxide, dry chemical or foam.   |
| Hazardous combustion products         | : | Smoke, fumes. Carbon monoxide and carbon dioxide can form. Nitrogen oxides can form.   |
| Protective equipment for firefighters | : | Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimize pressure build-up.  |
| Fire and explosion conditions         | : | Vapor concentrations in enclosed areas may ignite explosively. Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors. |

### 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. 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. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Keep container closed



**Vulkem Primer #70 - 6 GAL**

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when not in use. Vapor may migrate to sources of ignition. Do not smoke, weld, generate sparks, or use flame near container. Store in sealed containers in a cool, dry, ventilated warehouse location.

**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. 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.
- Protective measures : Use professional judgment in the selection, care, and use. Inspect and replace equipment at regular intervals.
- 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**

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Methyl methacrylate	80-62-6	ACGIH TWA: ACGIH STEL: OSHA PEL:	50 ppm 100 ppm 410 mg/m3	

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid
- Color : Colorless
- Odor : Acrylic
- 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 : 0.99
- % Volatile Weight : 0 %

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**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Oxidizing agents.Strong acids.Strong bases.  
Stability : Stable under normal conditions. Avoid welding arcs, flames or other high temperature sources.  
Hazardous polymerization : Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Methyl methacrylate, CAS-No.: 80-62-6  
Acute oral toxicity (LD-50 oral) 9,400 mg/kg ( Rat ) 7,800 mg/kg ( Rat ) 6,000 mg/kg ( Rabbit )  
Acute inhalation toxicity (LC-50) 3,750 mg/l for 8 h ( Rat ) 18.5 mg/l for 2 h ( Mouse )

Paraffin, CAS-No.: 64742-51-4  
Acute oral toxicity (LD-50 oral) 5,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat )  
Acute dermal toxicity (LD-50 dermal) 10,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat )  
2,000 mg/kg ( Rat ) 3,600 mg/kg ( Rabbit )

**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. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**
**CFR / DOT:**

UN1866, Resin solution, 3, PG II

**TDG:**

UN1866, RESIN SOLUTION, 3, PG II

**IMDG:**

UN1866, RESIN SOLUTION, 3, PG II



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**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**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 : Methyl methacrylate 80-62-6

SARA 311/312 Hazards : Acute Health Hazard  
 Fire Hazard

OSHA Hazardous Components :

Methyl methacrylate 80-62-6

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

OSHA Flammability : IB

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
 0 g/l

Regulatory VOC (less water and : 0 g/l  
 exempt solvent)

VOC Method 310 : 0.00 %

**U.S. State Regulations:**

MASS RTK Components : Methyl methacrylate 80-62-6

Penn RTK Components : Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7

NJ RTK Components : Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7  
 Ethylene glycol dimethacrylate 97-90-5  
 Paraffin 64742-51-4

Components under California Proposition 65:  
 None known.



**Vulkem Primer #70 - 6 GAL**

Version 1.0  
 REVISION DATE: 07/09/2014

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**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	3
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

## Vulkem TC 970 Clear - 6 GAL

Version 1.0  
REVISION DATE: 07/22/2014

Print Date 10/16/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem TC 970 Clear - 6 GAL**

Product code : 470800 805

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

Violet. Liquid. May cause moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. 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 moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue.

Eyes : Vapor and/or mist may cause eye irritation. Direct contact may cause temporary redness and discomfort.

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

Skin : May cause moderate irritation.

#### Aggravated Medical Conditions

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

#### Chronic Health Effects

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.

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

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Methyl methacrylate	80-62-6	30.0 - 60.0
Polymethylmethacrylate	25608-33-7	30.0 - 60.0
2-Propenoic acid, 2-ethylhexyl ester	103-11-7	15.0 - 40.0
Butyl diglycol methacrylate	7328-22-5	10.0 - 30.0

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Paraffin

64742-51-4

1.0 - 5.0

### 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                           | : | 11.5 °C, 54 °F   |
| Method                                | : | Closed Cup   |
| Lower explosion limit                 | : | 2.1 %(V) Solvent   |
| Upper explosion limit                 | : | 12.5 %(V) Solvent  |
| Autoignition temperature              | : | Not available.   |
| Extinguishing media                   | : | If water fog is ineffective, use carbon dioxide, dry chemical or foam.   |
| Hazardous combustion products         | : | Smoke, fumes. Carbon monoxide and carbon dioxide can form. Nitrogen oxides can form.   |
| Protective equipment for firefighters | : | Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimize pressure build-up.  |
| Fire and explosion conditions         | : | Vapor concentrations in enclosed areas may ignite explosively. Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors. |

### 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. 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. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Keep container closed



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when not in use. Vapor may migrate to sources of ignition. Do not smoke, weld, generate sparks, or use flame near container. Store in sealed containers in a cool, dry, ventilated warehouse location.

**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. 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.
- Protective measures : Use professional judgment in the selection, care, and use. Inspect and replace equipment at regular intervals.
- 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**

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Methyl methacrylate	80-62-6	ACGIH TWA: ACGIH STEL: OSHA PEL:	50 ppm 100 ppm 410 mg/m3	

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid
- Color : Violet
- Odor : Acrylic
- 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 : 0.98
- % Volatile Weight : 0 %

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**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Oxidizing agents.Strong acids.Strong bases.

Stability : Stable under normal conditions. Avoid welding arcs, flames or other high temperature sources.

Hazardous polymerization : Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Methyl methacrylate, CAS-No.: 80-62-6  
 Acute oral toxicity (LD-50 oral) 9,400 mg/kg ( Rat ) 7,800 mg/kg ( Rat ) 6,000 mg/kg ( Rabbit )  
 Acute inhalation toxicity (LC-50) 3,750 mg/l for 8 h ( Rat ) 18.5 mg/l for 2 h ( Mouse )

Paraffin, CAS-No.: 64742-51-4  
 Acute oral toxicity (LD-50 oral) 5,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat )  
 Acute dermal toxicity (LD-50 dermal) 10,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat )  
 2,000 mg/kg ( Rat ) 3,600 mg/kg ( Rabbit )

**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. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**
**CFR / DOT:**

UN1866, Resin solution, 3, PG II

**TDG:**

UN1866, RESIN SOLUTION, 3, PG II

**IMDG:**

UN1866, RESIN SOLUTION, 3, PG II



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**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory. One or more components are listed on the NDSL.

**U.S. Federal Regulations:**

SARA 313 Components : Methyl methacrylate 80-62-6

SARA 311/312 Hazards : Acute Health Hazard  
 Fire Hazard

OSHA Hazardous Components :

Methyl methacrylate 80-62-6

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

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0.00 %

**U.S. State Regulations:**

MASS RTK Components : Methyl methacrylate 80-62-6  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7

Penn RTK Components : Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7  
 Butyl diglycol methacrylate 7328-22-5

NJ RTK Components : Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7  
 Butyl diglycol methacrylate 7328-22-5  
 Paraffin 64742-51-4

Components under California Proposition 65:  
 None known.



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**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	3
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

# SAFETY DATA SHEET

## 1. Identification

**Material name:** VULKEM TC 970 GRAY - 6 GAL  
**Material:** 470718 805

**Recommended use and restriction on use**

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

Tremco U.S Sealants  
3735 Green Road  
Beachwood OH 44122  
US

<b>Contact person:</b>	EH&S Department
<b>Telephone:</b>	216-292-5000
<b>Emergency telephone number:</b>	1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable liquids	Category 2
-------------------	------------

**Health Hazards**

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1

**Unknown toxicity - Health**

Acute toxicity, oral	26.3 %
Acute toxicity, dermal	36.2 %
Acute toxicity, inhalation, vapor	67.8 %
Acute toxicity, inhalation, dust or mist	100 %

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment	67.8 %
Chronic hazards to the aquatic environment	100 %

**Label Elements**

**Hazard Symbol:**



<b>Signal Word:</b>	Danger
<b>Hazard Statement:</b>	Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
<b>Precautionary Statement:</b>	
<b>Prevention:</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.
<b>Response:</b>	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see this label). Wash contaminated clothing before reuse. In case of fire: Use ... to extinguish.
<b>Storage:</b>	Store in well-ventilated place. Keep cool.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Other hazards which do not result in GHS classification:</b>	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Methyl methacrylate	80-62-6	30 - 60%
2-Propenoic acid, 2-ethylhexyl ester	103-11-7	15 - 40%
Barium sulfate	7727-43-7	7 - 13%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

<b>Ingestion:</b>	Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.
<b>Inhalation:</b>	Move to fresh air.

**Skin Contact:** Take off immediately all contaminated clothing. Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

### Most important symptoms/effects, acute and delayed

**Symptoms:** Respiratory tract irritation. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

### Indication of immediate medical attention and special treatment needed

**Treatment:** Get medical attention if symptoms occur.

## 5. Fire-fighting measures

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Avoid water in straight hose stream; will scatter and spread fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:**

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:**

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

**7. Handling and storage**

**Precautions for safe handling:**

Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:**

Store in a well-ventilated place. Store in a cool place.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Chemical Identity	type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2011)
	PEL	100 ppm 410 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Barium sulfate - Inhalable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (02 2014)
Barium sulfate - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Barium sulfate - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	100 ppm	Canada. British Columbia OELs.

			(Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methyl methacrylate	TWAEV	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Methyl methacrylate	TWA	50 ppm 205 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Barium sulfate - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Barium sulfate - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Barium sulfate	TWAEV	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Barium sulfate - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Barium sulfate - Respirable dust.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

**General information:**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof ventilation equipment.

**Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:**

Use suitable protective gloves if risk of skin contact.

<b>Other:</b>	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Gray
<b>Odor:</b>	Mild petroleum/solvent
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	100.3 °C 212.5 °F
<b>Flash Point:</b>	11.5 °C 52.7 °F(Closed Cup)
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	12.5 %(V)
<b>Flammability limit - lower (%):</b>	2.1 %(V)
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.1
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
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<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Heat, sparks, flames.
<b>Incompatible Materials:</b>	Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.
<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	ATEmix: 15,790.31 mg/kg
<b>Dermal</b>	
<b>Product:</b>	ATEmix: 11,706.42 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	No data available.

<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.

<b>Skin Corrosion/Irritation</b>	
<b>Product:</b>	No data available.

<b>Specified substance(s):</b>	
Methyl methacrylate	in vivo (Rabbit): Experimental result, Weight of Evidence study

2-Propenoic acid, 2-ethylhexyl ester      in vivo (Rabbit): Experimental result, Key study

Barium sulfate      validated "in vitro" test method Read-across from supporting substance (structural analogue or surrogate), Key study

### Serious Eye Damage/Eye Irritation

**Product:** No data available.

**Specified substance(s):**

Methyl methacrylate      Irritating

2-Propenoic acid, 2-ethylhexyl ester      in vivo (Rabbit, 24 - 48 hrs): Not irritating

Barium sulfate      in vivo (Rabbit, 24 - 72 hrs): Not irritating

### Respiratory or Skin Sensitization

**Product:** No data available.

### Carcinogenicity

**Product:** No data available.

### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

### US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

### Germ Cell Mutagenicity

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

### Reproductive toxicity

**Product:** No data available.

### Specific Target Organ Toxicity - Single Exposure

**Product:** No data available.

### Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.

### Aspiration Hazard

**Product:** No data available.

**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Methyl methacrylate LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 410 mg/l Mortality

2-Propenoic acid, 2-ethylhexyl ester LC 50 (Carp (*Leuciscus idus melanotus*), 48 h): 23 mg/l Mortality

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Methyl methacrylate LC 50 (Water flea (*Daphnia magna*), 24 h): 1,760 mg/l Mortality

2-Propenoic acid, 2-ethylhexyl ester LC 50 (Brine shrimp (*Artemia salina*), 24 h): 72 mg/l Mortality

Barium sulfate EC 50 (Tubificid worm (*Tubifex tubifex*), 24 h): 34.2 - 57.71 mg/l Intoxication

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Methyl methacrylate NOAEL (Danio rerio, 35 d): 9.4 mg/l Experimental result, Key study  
LOAEL (Danio rerio, 35 d): 18.8 mg/l Experimental result, Key study  
LC 50 (Danio rerio, 35 d): 33.7 mg/l Experimental result, Key study

Barium sulfate LC 1 (*Oncorhynchus mykiss*, 28 d): 2,813 µg/l Experimental result, Supporting study  
LC 50 (*Oncorhynchus mykiss*, 28 d): 42,700 µg/l Experimental result, Supporting study  
LC 10 (*Oncorhynchus mykiss*, 28 d): 9,543 µg/l Experimental result, Supporting study

##### Aquatic Invertebrates

**Product:** No data available.

##### Toxicity to Aquatic Plants

**Product:** No data available.

## Persistence and Degradability

**Biodegradation**  
Product: No data available.

**BOD/COD Ratio**  
Product: No data available.

## Bioaccumulative Potential

**Bioconcentration Factor (BCF)**  
Product: No data available.

**Partition Coefficient n-octanol / water (log Kow)**  
Product: No data available.

**Specified substance(s):**  
Methyl methacrylate Log Kow: 1.38

**Mobility in Soil:** No data available.

**Other Adverse Effects:** No data available.

## 13. Disposal considerations

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

## 14. Transport information

### TDG:

UN1866, RESIN SOLUTION, 3, PG II

### CFR / DOT:

UN1866, Resin solution, 3, PG II

### IMDG:

UN1866, RESIN SOLUTION, 3, PG II

### Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methyl methacrylate	1000 lbs.
Barium sulfate	1000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Fire Hazard

Immediate (Acute) Health Hazards

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methyl methacrylate	1000 lbs.
Barium sulfate	1000 lbs.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Methyl methacrylate	500 lbs
2-Propenoic acid, 2-ethylhexyl ester	500 lbs
Barium sulfate	500 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>
Methyl methacrylate

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

## US. New Jersey Worker and Community Right-to-Know Act

### Chemical Identity

Methyl methacrylate  
2-Propenoic acid, 2-ethylhexyl ester  
Barium sulfate

## US. Massachusetts RTK - Substance List

### Chemical Identity

Methyl methacrylate  
2-Propenoic acid, 2-ethylhexyl ester  
Barium sulfate

## US. Pennsylvania RTK - Hazardous Substances

### Chemical Identity

Methyl methacrylate  
2-Propenoic acid, 2-ethylhexyl ester  
Barium sulfate

## US. Rhode Island RTK

### Chemical Identity

Methyl methacrylate

## Other Regulations:

**When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:**  
0 g/l

## Inventory Status:

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are

	not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision**

<b>Revision Date:</b>	07/22/2016
<b>Version #:</b>	1.1
<b>Further Information:</b>	No data available.
<b>Disclaimer:</b>	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.



# SAFETY DATA SHEET

## 1. Identification

**Material name:** VULKEM TC 970 SLATE GRAY - 6 GAL  
**Material:** 470831 805

**Recommended use and restriction on use**

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

Tremco U.S Sealants  
3735 Green Road  
Cleveland OH 44122  
US

**Contact person:** EH&S Department  
**Telephone:** 216-292-5000  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

**Physical Hazards**

Flammable liquids Category 1

**Health Hazards**

Skin Corrosion/Irritation Category 2  
Serious Eye Damage/Eye Irritation Category 2A  
Skin sensitizer Category 1

**Unknown toxicity - Health**

Acute toxicity, oral 26.3 %  
Acute toxicity, dermal 56.9 %  
Acute toxicity, inhalation, vapor 67.8 %  
Acute toxicity, inhalation, dust or mist 100 %

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment 67.8 %  
Chronic hazards to the aquatic environment 100 %

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

<b>Hazard Statement:</b>	Extremely flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
<b>Precautionary Statement:</b>	
<b>Prevention:</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.
<b>Response:</b>	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see this label). Wash contaminated clothing before reuse. In case of fire: Use ... to extinguish.
<b>Storage:</b>	Store in well-ventilated place. Keep cool.
<b>Disposal:</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
<b>Other hazards which do not result in GHS classification:</b>	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

<b>3. Composition/information on ingredients</b>
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**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Methyl methacrylate	80-62-6	30 - 60%
2-Propenoic acid, 2-ethylhexyl ester	103-11-7	15 - 40%
Barium sulfate	7727-43-7	7 - 13%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

<b>4. First-aid measures</b>
------------------------------

<b>Ingestion:</b>	Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.
<b>Inhalation:</b>	Move to fresh air.

**Skin Contact:** Take off immediately all contaminated clothing. Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

### Most important symptoms/effects, acute and delayed

**Symptoms:** Respiratory tract irritation. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

### Indication of immediate medical attention and special treatment needed

**Treatment:** Get medical attention if symptoms occur.

## 5. Fire-fighting measures

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Avoid water in straight hose stream; will scatter and spread fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:**

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:**

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

**7. Handling and storage**

**Precautions for safe handling:**

Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:**

Store in a well-ventilated place. Store in a cool place.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

Chemical Identity	type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (2011)
	PEL	100 ppm 410 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Barium sulfate - Inhalable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (02 2014)
Barium sulfate - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Barium sulfate - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for

			Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methyl methacrylate	TWAEV	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Methyl methacrylate	TWA	50 ppm 205 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Barium sulfate - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Barium sulfate - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Barium sulfate	TWAEV	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Barium sulfate - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Barium sulfate - Respirable dust.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

**General information:**

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof ventilation equipment.

**Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:**

Use suitable protective gloves if risk of skin contact.

**Other:**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Dark gray
<b>Odor:</b>	Mild petroleum/solvent
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	11.5 °C 52.7 °F(Closed Cup)
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	12.5 %(V)
<b>Flammability limit - lower (%):</b>	2.1 %(V)
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.1
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

**Reactivity:** No data available.

**Chemical Stability:** Material is stable under normal conditions.

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<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Heat, sparks, flames.
<b>Incompatible Materials:</b>	Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.
<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral Product:</b>	No data available.
<b>Dermal Product:</b>	ATEmix: 8,244.42 mg/kg
<b>Inhalation Product:</b>	No data available.

<b>Repeated dose toxicity Product:</b>	No data available.
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<b>Skin Corrosion/Irritation Product:</b>	No data available.
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<b>Serious Eye Damage/Eye Irritation Product:</b>	No data available.
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**Specified substance(s):**

Methyl methacrylate	Irritating
2-Propenoic acid, 2-ethylhexyl ester	in vivo (Rabbit, 24 - 48 hrs): Not irritating
Barium sulfate	in vivo (Rabbit, 24 - 72 hrs): Not irritating

**Respiratory or Skin Sensitization****Product:** No data available.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Other effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:**

**Fish****Product:** No data available.**Specified substance(s):**Methyl methacrylate LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 410 mg/l Mortality2-Propenoic acid, 2-ethylhexyl ester LC 50 (Carp (*Leuciscus idus melanotus*), 48 h): 23 mg/l Mortality**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Methyl methacrylate LC 50 (Water flea (*Daphnia magna*), 24 h): 1,760 mg/l Mortality2-Propenoic acid, 2-ethylhexyl ester LC 50 (Brine shrimp (*Artemia salina*), 24 h): 72 mg/l MortalityBarium sulfate EC 50 (Tubificid worm (*Tubifex tubifex*), 24 h): 34.2 - 57.71 mg/l Intoxication**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Methyl methacrylate LC 50 (Danio rerio, 35 d): 33.7 mg/l experimental result  
LOAEL (Danio rerio, 35 d): 18.8 mg/l experimental result  
NOAEL (Danio rerio, 35 d): 9.4 mg/l experimental resultBarium sulfate LC 50 (*Oncorhynchus mykiss*, 28 d): 42,700 µg/l experimental result**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.

**Specified substance(s):**  
Methyl methacrylate      Log Kow: 1.38

**Mobility in Soil:**      No data available.

**Other Adverse Effects:**      No data available.

### 13. Disposal considerations

**Disposal instructions:**      Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:**      No data available.

### 14. Transport information

**TDG:**

UN1866, RESIN SOLUTION, 3, PG II

**CFR / DOT:**

UN1866, Resin solution, 3, PG II

**IMDG:**

UN1866, RESIN SOLUTION, 3, PG II

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

### 15. Regulatory information

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methyl methacrylate	1000 lbs.
Barium sulfate	1000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Fire Hazard  
Immediate (Acute) Health Hazards

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methyl methacrylate	1000 lbs.
Barium sulfate	1000 lbs.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Methyl methacrylate	500 lbs
2-Propenoic acid, 2-ethylhexyl ester	500 lbs
Barium sulfate	500 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>
Methyl methacrylate

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

**US. New Jersey Worker and Community Right-to-Know Act**

<u>Chemical Identity</u>
Methyl methacrylate
2-Propenoic acid, 2-ethylhexyl ester
Barium sulfate

**US. Massachusetts RTK - Substance List**

<u>Chemical Identity</u>
Methyl methacrylate
2-Propenoic acid, 2-ethylhexyl ester
Barium sulfate

**US. Pennsylvania RTK - Hazardous Substances**

<u>Chemical Identity</u>
Methyl methacrylate
2-Propenoic acid, 2-ethylhexyl ester
Barium sulfate

**US. Rhode Island RTK**

<u>Chemical Identity</u>
Methyl methacrylate

**Other Regulations:**

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:

0 g/l

**Inventory Status:**

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.

**16. Other information, including date of preparation or last revision**

<b>Revision Date:</b>	09/28/2015
<b>Version #:</b>	1.0
<b>Further Information:</b>	No data available.

**Disclaimer:**

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.



## Vulkem WC 570 - 6 GAL

Version 1.0  
REVISION DATE: 07/18/2014

Print Date 10/16/2014

### SECTION 1 - PRODUCT IDENTIFICATION

Trade name : **Vulkem WC 570 - 6 GAL**

Product code : 470570 805

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

Cloudy or clear. Liquid. May cause moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. 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 moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue.

Eyes : Vapor and/or mist may cause eye irritation. Direct contact may cause temporary redness and discomfort.

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

Skin : May cause moderate irritation.

#### Aggravated Medical Conditions

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

#### Chronic Health Effects

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.

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

### SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Methyl methacrylate	80-62-6	40.0 - 70.0
Polymethylmethacrylate	25608-33-7	30.0 - 60.0
2-Propenoic acid, 2-ethylhexyl ester	103-11-7	10.0 - 30.0

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Urethane methacrylate  
Paraffin

NJ TSRN# 51721300-6492P  
64742-51-4

10.0 - 30.0  
1.0 - 5.0

### 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 : 11.5 °C, 54 °F
- Method : Closed Cup
- Lower explosion limit : 2.5 %(V) Solvent
- Upper explosion limit : 12.5 %(V) Solvent
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Smoke, fumes. Carbon monoxide and carbon dioxide can form. Nitrogen oxides can form.
- Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimize pressure build-up.
- Fire and explosion conditions : Vapor concentrations in enclosed areas may ignite explosively. Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors.

### 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. 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. Personal protective equipment must be

## Vulkem WC 570 - 6 GAL

Version 1.0  
REVISION DATE: 07/18/2014

Print Date 10/16/2014

worn during maintenance or repair of contaminated mixer, reactor, or other equipment. 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. Store in sealed containers in a cool, dry, ventilated warehouse location.

### 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. 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.
- Protective measures : Use professional judgment in the selection, care, and use. Inspect and replace equipment at regular intervals.
- 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

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Methyl methacrylate	80-62-6	ACGIH TWA: ACGIH STEL: OSHA PEL:	50 ppm 100 ppm 410 mg/m3	

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid
- Color : Cloudy or clear
- Odor : Acrylic
- 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 : 0.99
- % Volatile Weight : 0 %

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**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Oxidizing agents.Strong acids.Strong bases.

Stability : Stable under normal conditions. Avoid welding arcs, flames or other high temperature sources.

Hazardous polymerization : Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Methyl methacrylate, CAS-No.: 80-62-6  
 Acute oral toxicity (LD-50 oral) 9,400 mg/kg ( Rat ) 7,800 mg/kg ( Rat ) 6,000 mg/kg ( Rabbit )  
 Acute inhalation toxicity (LC-50) 3,750 mg/l for 8 h ( Rat ) 18.5 mg/l for 2 h ( Mouse )

Paraffin, CAS-No.: 64742-51-4  
 Acute oral toxicity (LD-50 oral) 5,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat )  
 Acute dermal toxicity (LD-50 dermal) 10,000 mg/kg ( Rat ) 5,000 mg/kg ( Rat )  
 2,000 mg/kg ( Rat ) 3,600 mg/kg ( Rabbit )

**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. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**
**CFR / DOT:**

UN1866, Resin solution, 3, PG II

**TDG:**

UN1866, RESIN SOLUTION, 3, PG II

**IMDG:**

UN1866, RESIN SOLUTION, 3, PG II



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**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory. One or more components are not listed on the DSL or NDSL.

**U.S. Federal Regulations:**

SARA 313 Components : Methyl methacrylate 80-62-6

SARA 311/312 Hazards : Acute Health Hazard  
 Fire Hazard

OSHA Hazardous Components :

Methyl methacrylate 80-62-6  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7

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

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Regulatory VOC (less water and exempt solvent) : 0 g/l

VOC Method 310 : 0.00 %

**U.S. State Regulations:**

MASS RTK Components : Methyl methacrylate 80-62-6  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7

Penn RTK Components : Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7  
 Urethane methacrylate NJ TSRN# 51721300-6492P

NJ RTK Components : Methyl methacrylate 80-62-6  
 Polymethylmethacrylate 25608-33-7  
 2-Propenoic acid, 2-ethylhexyl ester 103-11-7  
 Urethane methacrylate NJ TSRN# 51721300-6492P  
 Paraffin 64742-51-4

Components under California Proposition 65:  
 None known.



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**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	3
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