



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Form:** Mixture

**Product Name:** PMMA Flashing Resin Winter Grade

#### Intended Use of the Product

**Use of the Substance/Mixture:** Liquid Resin Roofing & Waterproofing Systems. For professional use only.

#### Name, Address, and Telephone of the Responsible Party

##### **Company**

GAF

1 Campus Drive, Parsippany, NJ 07054 USA

Telephone: 877-GAF-ROOF

#### Emergency Telephone Number

**Emergency Number** : 800-424-9300 (CHEMTREC)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### **Classification (GHS-US)**

Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Muta. 1B	H340
Carc. 1B	H350
Carc. 2	H351
STOT SE 3	H335
STOT SE 3	H336
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

#### Label Elements

##### **GHS-US Labeling**

##### **Hazard Pictograms (GHS-US)**



##### **Signal Word (GHS-US)**

: Danger

##### **Hazard Statements (GHS-US)**

: H225 - Highly flammable liquid and vapor.  
H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.



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- H319 - Causes serious eye irritation.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 - May cause respiratory irritation.  
H336 - May cause drowsiness or dizziness.  
H340 - May cause genetic defects.  
H350 - May cause cancer.  
H351 - Suspected of causing cancer  
H360 - May damage fertility or the unborn child.  
H402 - Harmful to aquatic life.  
H412 - Harmful to aquatic life with long lasting effects.
- Precautionary Statements (GHS-US) :** P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, ventilating, and lighting equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P260 - Do not breathe vapors, mist, spray.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P272 - Contaminated work clothing must not be allowed out of the workplace.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P301+P312 - If swallowed: Call a poison center/doctor if you feel unwell.  
P302+P352 - If on skin: Wash with plenty of water.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 - If exposed or concerned: Get medical advice/attention.  
P321 - Specific treatment (see section 4).  
P330 - Rinse mouth.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P342+P311 - If experiencing respiratory symptoms: Call a poison center/doctor.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P370+P378 - In case of fire: Use appropriate media to extinguish.  
P403+P233+ P235 - Store in a well-ventilated place. Keep container tightly closed. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Flammable vapors can accumulate in head space of closed systems.



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Unknown Acute Toxicity (GHS-US) Not available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Methyl methacrylate	(CAS No) 80-62-6	15 - 40	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 3, H402
2-Ethylhexyl acrylate	(CAS No) 103-11-7	10 - 30	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Titanium dioxide	(CAS No) 13463-67-7	0 - 20	Carc. 2, H351
Quartz	(CAS No) 14808-60-7	0.1 – 2.0	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Naphtha, petroleum, hydrodesulfurized heavy	(CAS No) 64742-82-1	0 – 0.5	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	(CAS No) 162627-17-0	0 – 0.5	Skin Sens. 1, H317
Solvent naphtha, petroleum, light aromatic	(CAS No) 64742-95-6	0 – 0.5	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

Multiple WHMIS ranges have been utilized due to varying composition.

Full text of H-phrases: see section 16



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### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Seek medical attention.

#### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Harmful if swallowed. Causes eye irritation. Skin irritation. May cause an allergic skin reaction. Irritation of respiratory tract. May damage fertility. May damage the unborn child. Inhalation may cause allergic respiratory reaction with asthma-like symptoms and difficulty breathing. Vapors may cause drowsiness and dizziness. May cause cancer. May cause heritable genetic damage.

**Inhalation:** May cause respiratory irritation. Exposure may produce an allergic reaction. May cause drowsiness or dizziness.

**Skin Contact:** Causes skin irritation. May cause an allergic skin reaction.

**Eye Contact:** Causes eye irritation.

**Ingestion:** Swallowing a small quantity of this material will result in serious health hazard.

**Chronic Symptoms:** May damage fertility. May damage the unborn child. May cause heritable genetic damage. May cause cancer.

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Water spray, dry chemical, foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Highly flammable liquid and vapor.

**Explosion Hazard:** May form flammable/explosive vapor-air mixture.

**Reactivity:** Product may polymerize at 60°C (>140°F), causing an exothermic reaction which may cause container damage or fire. May react with peroxides, oxidizers, and incompatibilities.

#### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Hydrocarbons. Black smoke. Methyl methacrylate. Oxides of titanium. May release flammable gases. May liberate toxic gases.

**Other Information:** Do not allow run-off from fire fighting to enter drains or water courses.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Use special care to avoid static electric charges. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid all eye and skin contact and do not breathe vapor and mist. Do not allow product to spread into the environment. Handle in accordance with good industrial hygiene and safety practice.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.



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### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

### Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill. Use only non-sparking tools.

### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Additional Hazards When Processed:** Handle empty containers with care because residual vapors are flammable. Product may polymerize at 60°C (>140°F), causing an exothermic reaction which may cause container damage or fire. May react with peroxides, oxidizers, and incompatibilities. When heated to decomposition, emits toxic fumes.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place. Keep/Store away from extremely high or low temperatures, ignition sources, combustible materials, heat, direct sunlight, incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

### Specific End Use(s)

Parapro Liquid Resin system. For professional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

<b>Methyl methacrylate (80-62-6)</b>		
Mexico	OEL TWA (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
Mexico	OEL TWA (ppm)	100 ppm
Mexico	OEL STEL (mg/m <sup>3</sup> )	510 mg/m <sup>3</sup>
Mexico	OEL STEL (ppm)	125 ppm
USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA ACGIH	ACGIH STEL (ppm)	100 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA IDLH	US IDLH (ppm)	1000 ppm
Alberta	OEL STEL (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
Alberta	OEL STEL (ppm)	100 ppm
Alberta	OEL TWA (mg/m <sup>3</sup> )	205 mg/m <sup>3</sup>
Alberta	OEL TWA (ppm)	50 ppm
British Columbia	OEL STEL (ppm)	100 ppm



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<b>British Columbia</b>	OEL TWA (ppm)	50 ppm
<b>Manitoba</b>	OEL STEL (ppm)	100 ppm
<b>Manitoba</b>	OEL TWA (ppm)	50 ppm
<b>New Brunswick</b>	OEL TWA (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
<b>New Brunswick</b>	OEL TWA (ppm)	100 ppm
<b>Newfoundland &amp; Labrador</b>	OEL STEL (ppm)	100 ppm
<b>Newfoundland &amp; Labrador</b>	OEL TWA (ppm)	50 ppm
<b>Nova Scotia</b>	OEL STEL (ppm)	100 ppm
<b>Nova Scotia</b>	OEL TWA (ppm)	50 ppm
<b>Nunavut</b>	OEL STEL (mg/m <sup>3</sup> )	510 mg/m <sup>3</sup>
<b>Nunavut</b>	OEL STEL (ppm)	125 ppm
<b>Nunavut</b>	OEL TWA (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
<b>Nunavut</b>	OEL TWA (ppm)	100 ppm
<b>Northwest Territories</b>	OEL STEL (mg/m <sup>3</sup> )	510 mg/m <sup>3</sup>
<b>Northwest Territories</b>	OEL STEL (ppm)	125 ppm
<b>Northwest Territories</b>	OEL TWA (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
<b>Northwest Territories</b>	OEL TWA (ppm)	100 ppm
<b>Ontario</b>	OEL STEL (ppm)	100 ppm
<b>Ontario</b>	OEL TWA (ppm)	50 ppm
<b>Prince Edward Island</b>	OEL STEL (ppm)	100 ppm
<b>Prince Edward Island</b>	OEL TWA (ppm)	50 ppm
<b>Québec</b>	VEMP (mg/m <sup>3</sup> )	205 mg/m <sup>3</sup>
<b>Québec</b>	VEMP (ppm)	50 ppm
<b>Saskatchewan</b>	OEL STEL (ppm)	100 ppm
<b>Saskatchewan</b>	OEL TWA (ppm)	50 ppm
<b>Yukon</b>	OEL STEL (mg/m <sup>3</sup> )	510 mg/m <sup>3</sup>
<b>Yukon</b>	OEL STEL (ppm)	125 ppm
<b>Yukon</b>	OEL TWA (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
<b>Yukon</b>	OEL TWA (ppm)	100 ppm
<b>Quartz (14808-60-7)</b>		
<b>Mexico</b>	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable fraction)
<b>USA ACGIH</b>	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
<b>USA OSHA</b>	OSHA PEL (STEL) (mg/m <sup>3</sup> )	250 mppcf/%SiO <sub>2</sub> +5, 10mg/m <sup>3</sup> /%SiO <sub>2</sub> +2
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable dust)
<b>USA IDLH</b>	US IDLH (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (respirable dust)
<b>Alberta</b>	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable particulate)
<b>British Columbia</b>	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable)
<b>Manitoba</b>	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
<b>New Brunswick</b>	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable fraction)
<b>Newfoundland &amp; Labrador</b>	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
<b>Nova Scotia</b>	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
<b>Nunavut</b>	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable mass)
<b>Northwest Territories</b>	OEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable mass)
<b>Ontario</b>	OEL TWA (mg/m <sup>3</sup> )	0.10 mg/m <sup>3</sup> (designated substances regulation-respirable)
<b>Prince Edward Island</b>	OEL TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> (respirable fraction)
<b>Québec</b>	VEMP (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (respirable dust)
<b>Saskatchewan</b>	OEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> (respirable fraction)
<b>Yukon</b>	OEL TWA (mg/m <sup>3</sup> )	300 particle/mL



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Titanium dioxide (13463-67-7)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Mexico	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (total dust)
USA IDLH	US IDLH (mg/m <sup>3</sup> )	5000 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (total dust)
Manitoba	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable mass)
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (respirable mass)
Ontario	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Québec	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m <sup>3</sup> )	30 mppcf
Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	3000 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable mass)
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable mass)
Yukon	OEL TWA (mg/m <sup>3</sup> )	300 particle/mL (as measured by Konimeter instrumentation)

### Exposure Controls

**Appropriate Engineering Controls:** Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment:** Protective clothing. Gloves. Insufficient ventilation: wear respiratory protection. Protective goggles.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Wear fire/flammable resistant/retardant clothing.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

**Thermal Hazard Protection:** Wear suitable protective clothing.

**Other Information:** When using, do not eat, drink or smoke.



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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: White, pebble gray, gray, beige
Odor	: Methyl methacrylate, Light Floral Scent
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: 10 °C (50.00 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: > 1000 hPa @50°C (122°F)
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific gravity / density	: 0.97 - 1.4 g/l @21°C (69.8°F)
Specific Gravity	: Not available
Solubility	: Insoluble in water.
Partition Coefficient: N-octanol/water	: Not available
Viscosity	: 25- 42 dPa*s @20°C (68°F)
Percent VOC Content Catalyzed	: Less than 50 g/L
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Static discharge could act as an ignition source.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Product may polymerize at 60°C (>140°F), causing an exothermic reaction which may cause container damage or fire. May react with peroxides, oxidizers, and incompatibilities.

**Chemical Stability:** Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

**Possibility of Hazardous Reactions:** Hazardous polymerization may occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Heat. Ignition sources. Incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). May release flammable gases. Toxic gases. Nitrogen oxides. Hydrocarbons. Methyl methacrylate. Oxides of titanium.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Harmful if swallowed.

#### LD50 and LC50 Data:

Parapro Roof Membrane Resin (Gray, White); Paracoat; Terapro Base Resin; Terapro Flashing Resin; Terapro VTS Resin; Terapro Wearing Layer; Parapro Flashing (Gray, White); Paracoat Sand (Gray, White)

ATE US (oral)	1749.78 mg/kg body weight
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**Skin Corrosion/Irritation:** Causes skin irritation.





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**Serious Eye Damage/Irritation:** Causes serious eye irritation.

**Respiratory or Skin Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** May cause genetic defects.

**Teratogenicity:** Not available

**Carcinogenicity:** May cause cancer.

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** May damage fertility or the unborn child.

**Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation. May cause drowsiness or dizziness.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation. Exposure may produce an allergic reaction. May cause drowsiness or dizziness.

**Symptoms/Injuries After Skin Contact:** Causes skin irritation. May cause an allergic skin reaction.

**Symptoms/Injuries After Eye Contact:** Causes eye irritation.

**Symptoms/Injuries After Ingestion:** Swallowing a small quantity of this material will result in serious health hazard.

**Chronic Symptoms:** May damage fertility. May damage the unborn child. May cause heritable genetic damage. May cause cancer.

### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>Methyl methacrylate (80-62-6)</b>	
LD50 Oral Rat	7900 mg/kg
LC50 Inhalation Rat	4632 ppm/4h
<b>2-Ethylhexyl acrylate (103-11-7)</b>	
LD50 Oral Rat	4435 mg/kg
LD50 Dermal Rabbit	7522 mg/kg
<b>Quartz (14808-60-7)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
<b>Titanium dioxide (13463-67-7)</b>	
LD50 Oral Rat	> 10000 mg/kg
<b>Naphtha, petroleum, hydrodesulfurized heavy (64742-82-1)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 3160 mg/kg
<b>Solvent naphtha, petroleum, light aromatic (64742-95-6)</b>	
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	3400 ppm/4h
ATE US (gases)	3,400.00 ppmV/4h
<b>Methyl methacrylate (80-62-6)</b>	
IARC Group	3
<b>2-Ethylhexyl acrylate (103-11-7)</b>	
IARC Group	3
<b>Quartz (14808-60-7)</b>	
IARC Group	1
<b>National Toxicity Program (NTP) Status</b>	Known Human Carcinogens.



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

Titanium dioxide (13463-67-7)	
IARC Group	2B

### SECTION 12: ECOLOGICAL INFORMATION

#### Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

Methyl methacrylate (80-62-6)	
LC50 Fish 1	243 - 275 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	69 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	125.5 - 190.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
2-Ethylhexyl acrylate (103-11-7)	
EC50 Daphnia 1	17.45 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Solvent naphtha, petroleum, light aromatic (64742-95-6)	
LC50 Fish 1	9.22 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)

**Persistence and Degradability** Not available

#### Bioaccumulative Potential

Parapro Roof Membrane Resin (Gray, White); Paracoat; Terapro Base Resin; Terapro Flashing Resin; Terapro VTS Resin; Terapro Wearing Layer; Parapro Flashing (Gray, White); Paracoat Sand (Gray, White)	
Bioaccumulative Potential	Not established.

Methyl methacrylate (80-62-6)	
Log Pow	0.7
2-Ethylhexyl acrylate (103-11-7)	
Log Pow	4.64 (at 25 °C)

**Mobility in Soil** Not available

#### Other Adverse Effects

Other Information: Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Additional Information:** Handle empty containers with care because residual vapors are flammable.

### SECTION 14: TRANSPORT INFORMATION

#### In Accordance with DOT

Proper Shipping Name : PAINT  
Hazard Class : 3  
Identification Number : UN1263  
Label Codes : 3  
Packing Group : II  
ERG Number : 128



#### In Accordance with IMDG

Proper Shipping Name : PAINT  
Hazard Class : 3  
Identification Number : UN1263  
Packing Group : II  
Label Codes : 3



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-E

### In Accordance with IATA

Proper Shipping Name : PAINT

Packing Group : II

Identification Number : UN1263

Hazard Class : 3

Label Codes : 3

ERG Code (IATA) : 3L



### In Accordance with TDG

Proper Shipping Name : PAINT

Packing Group : II

Hazard Class : 3

Identification Number : UN1263

Label Codes : 3



## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

Parapro Roof Membrane Resin (Gray, White); Paracoat; Terapro Base Resin; Terapro Flashing Resin; Terapro VTS Resin; Terapro Wearing Layer; Parapro Flashing (Gray, White); Paracoat Sand (Gray, White)

#### SARA Section 311/312 Hazard Classes

Fire hazard  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Methyl methacrylate (80-62-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

#### SARA Section 313 - Emission Reporting

1.0 %

#### 2-Ethylhexyl acrylate (103-11-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Naphtha, petroleum, hydrodesulfurized heavy (64742-82-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Solvent naphtha, petroleum, light aromatic (64742-95-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### US State Regulations

#### Quartz (14808-60-7)

##### U.S. - California - Proposition 65 - Carcinogens List

WARNING: This product contains chemicals known to the State of California to cause cancer.

#### Titanium dioxide (13463-67-7)

##### U.S. - California - Proposition 65 - Carcinogens List

WARNING: This product contains chemicals known to the State of California to cause cancer.



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

### Methyl methacrylate (80-62-6)

U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)  
U.S. - Colorado - Hazardous Wastes - Discarded Chemical Products, Off-Specification Species, Container and Spill Residues  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)  
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)  
U.S. - Idaho - Occupational Exposure Limits - TWAs  
U.S. - Illinois - Toxic Air Contaminants  
U.S. - Louisiana - Reportable Quantity List for Pollutants  
U.S. - Maine - Air Pollutants - Hazardous Air Pollutants  
U.S. - Massachusetts - Allowable Ambient Limits (AALs)  
U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Massachusetts - Threshold Effects Exposure Limits (TEELs)  
U.S. - Massachusetts - Toxics Use Reduction Act  
U.S. - Michigan - Occupational Exposure Limits - TWAs  
U.S. - Michigan - Polluting Materials List  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - TWAs  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances  
U.S. - New Jersey - Environmental Hazardous Substances List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New York - Occupational Exposure Limits - TWAs  
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour  
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
U.S. - North Dakota - Hazardous Wastes - Discarded Chemical Products, Off-Specification Species, Container and Spill Residues  
U.S. - Oregon - Permissible Exposure Limits - TWAs  
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 24-Hour  
U.S. - South Carolina - Toxic Air Pollutants - Maximum Allowable Concentrations  
U.S. - South Carolina - Toxic Air Pollutants - Pollutant Categories  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Vermont - Hazardous Waste - Hazardous Constituents  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Washington - Dangerous Waste - Dangerous Waste Constituents List  
U.S. - Washington - Dangerous Waste - Discarded Chemical Products List



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## PMMA Flashing Resin Winter Grade

U.S. - Washington - Permissible Exposure Limits - STELS  
U.S. - Washington - Permissible Exposure Limits - TWAs  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater  
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

### **2-Ethylhexyl acrylate (103-11-7)**

U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2  
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1  
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2  
RTK - U.S. - Massachusetts - Right To Know List  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term

### **Quartz (14808-60-7)**

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)  
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts  
U.S. - Illinois - Toxic Air Contaminant Carcinogens  
U.S. - Illinois - Toxic Air Contaminants  
U.S. - Maine - Chemicals of High Concern  
RTK - U.S. - Massachusetts - Right To Know List  
U.S. - Michigan - Occupational Exposure Limits - TWAs  
U.S. - Minnesota - Chemicals of High Concern  
U.S. - Minnesota - Hazardous Substance List  
U.S. - Minnesota - Permissible Exposure Limits - TWAs  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - New Jersey - Special Health Hazards Substances List  
U.S. - New York - Occupational Exposure Limits - Mineral Dusts  
U.S. - New York - Occupational Exposure Limits - TWAs  
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts  
RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - Tennessee - Occupational Exposure Limits - TWAs  
U.S. - Texas - Effects Screening Levels - Long Term  
U.S. - Texas - Effects Screening Levels - Short Term  
U.S. - Vermont - Permissible Exposure Limits - TWAs  
U.S. - Washington - Permissible Exposure Limits - STELS  
U.S. - Washington - Permissible Exposure Limits - TWAs

### **Titanium dioxide (13463-67-7)**

U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)  
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)  
U.S. - Idaho - Occupational Exposure Limits - TWAs  
U.S. - Illinois - Toxic Air Contaminant Carcinogens  
RTK - U.S. - Massachusetts - Right To Know List



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

U.S. - Michigan - Occupational Exposure Limits - TWAs  
 U.S. - Minnesota - Chemicals of High Concern  
 U.S. - Minnesota - Hazardous Substance List  
 U.S. - Minnesota - Permissible Exposure Limits - TWAs  
 U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour  
 U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual  
 RTK - U.S. - New Jersey - Right to Know Hazardous Substance List  
 U.S. - New York - Occupational Exposure Limits - TWAs  
 U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour  
 U.S. - Oregon - Permissible Exposure Limits - TWAs  
 RTK - U.S. - Pennsylvania - RTK (Right to Know) List  
 U.S. - Tennessee - Occupational Exposure Limits - TWAs  
 U.S. - Texas - Effects Screening Levels - Long Term  
 U.S. - Texas - Effects Screening Levels - Short Term  
 U.S. - Vermont - Permissible Exposure Limits - TWAs  
 U.S. - Washington - Permissible Exposure Limits - STELs  
 U.S. - Washington - Permissible Exposure Limits - TWAs

### Naphtha, petroleum, hydrodesulfurized heavy (64742-82-1)

U.S. - Maine - Chemicals of High Concern  
 U.S. - Minnesota - Chemicals of High Concern  
 U.S. - Minnesota - Chemicals of High Concern - Persistent Bioaccumulative Toxins  
 U.S. - Texas - Effects Screening Levels - Long Term  
 U.S. - Texas - Effects Screening Levels - Short Term

### Solvent naphtha, petroleum, light aromatic (64742-95-6)

U.S. - Texas - Effects Screening Levels - Long Term  
 U.S. - Texas - Effects Screening Levels - Short Term

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Issue Date** : 05/19/2017  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 1B	Carcinogenicity Category 1B
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Muta. 1B	Germ cell mutagenicity Category 1B
Repr. 2	Reproductive toxicity Category 2
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H227	Combustible liquid
	May form combustible dust concentrations in air
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

### ADDITIONAL COMMENTS:



# Safety Data Sheet

## PMMA Flashing Resin Winter Grade

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None.

**DATE OF PREVIOUS SDS:**

4/21/2016

**CHANGES SINCE PREVIOUS SDS:**

Name and phone number change.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.