SAFETY DATA SHEET SDS # 4208
GAF PMMA Paste

1. PRODUCT AND COMPANY IDENTIFICATION

1.2. **Product identifiers**
Product name: **GAF PMMA Paste**

1.3. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Parapro Liquid Resin system. For professional use only.

1.4. Details of the supplier of the safety data sheet

Supplier:	GAF 1 Campus Drive, Parsippany, NJ 07054 USA
Telephone:	877-GAF-ROOF

1.5. **Emergency telephone number**

24 Hour Emergency Phone #: 800-424-9300 (ChemTrec)

2. HAZARDS IDENTIFICATION

2.1. **Classification of the substance or mixture**

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

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
Repr. 1B	H360
STOT SE 3	H335
STOT SE 3	H336
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

Pictogram:



Signal word: Danger

Hazard statement(s)
Highly flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.
May cause drowsiness or dizziness.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Harmful to aquatic life.

Precautionary statement(s)
Obtain, read and follow all safety instructions before use.
Keep away from heat, sparks, open flames, hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical, ventilating, and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands thoroughly after handling.
Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Keep container tightly closed.

If swallowed: Call a poison center/doctor if you feel unwell.
If on skin: Wash with plenty of water.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see section 4).
Rinse mouth.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If experiencing respiratory symptoms: Call a poison center/doctor.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use appropriate media to extinguish.
Store in a well-ventilated place.
Keep container tightly closed.
Keep cool.
Store locked up.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

CHEMICAL NAME	CAS #	WT %
Methyl methacrylate	80-62-6	15-35
2-Ethylhexyl acrylate	103-11-7	10-25
Titanium dioxide	13463-67-7	0-5

Quartz	14808-60-7	0-1
2-Propenoic acid, 2-methyl-, oxybis(2,1-ethanediyloxy-2,1-ethanediyl) ester	109-17-1	0-1
1-Methyl-2-pyrrolidone	872-50-4	0-5

Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

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.

5. FIREFIGHTING 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, CO2). 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 firefighting to enter drains or water courses.

Reference to Other Sections
Refer to section 9 for flammability properties.

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.

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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Chemical Name	CAS#	ACGIH TLV	OSHA TWA	NIOSH REL
Methyl methacrylate	80-62-6	100 ppm	100 ppm	100 ppm
Quartz	14808-60-7	0.025 mg/m³	250 mppcf	0.05 mg/m³
Titanium Dioxide	13463-76-7	10 mg/m3	15 mg/m3	None

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.

Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame 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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
APPEARANCE & ODOR:	White, pebble gray, gray. Light floral scent.
ODOR THRESHOLD (PPM):	Not Available
VAPOR PRESSURE (mmHg):	> 1000 hPa @50°C (122°F)
DENSITY:	Not Available
EVAPORATION RATE (nBuAc = 1):	Not Available
BOILING POINT (F°):	Not Available
FREEZING POINT (F°):	Not Available
pH:	Not Available
VISCOSITY, Dynamic	Not Available
SOLUBILITY IN WATER:	Insoluble
FLASH POINT:	10 °C (50.00 °F)
AUTOIGNITION TEMPERATURE:	Not Established
LEL	Not Established
UEL	Not Established
VOC	<150 g/L
SPECIFIC GRAVITY	0.97 - 1.4 g/l @21°C (69.8°F)
Explosion Data – Sensitivity to Static Discharge	Static discharge could act as an ignition source.

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, CO2). May release flammable gases. Toxic gases. Nitrogen oxides. Hydrocarbons. Methyl methacrylate. Oxides of titanium.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Harmful if swallowed.
Skin Corrosion/Irritation: Causes skin irritation.
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.

Methyl methacrylate (80-62-6)
LD50 Oral Rat 7900 mg/kg
LC50 Inhalation Rat 4632 ppm/4h

2-Ethylhexyl acrylate (103-11-7)
LD50 Oral Rat 4435 mg/kg
LD50 Dermal Rabbit 7522 mg/kg

Quartz (14808-60-7)
LD50 Oral Rat > 5000 mg/kg
LD50 Dermal Rat > 5000 mg/kg

Titanium dioxide (13463-67-7)
LD50 Oral Rat > 10000 mg/kg

1-Methyl-2-pyrrolidone (872-50-4)
LD50 Oral Rat 4150 mg/kg
LD50 Dermal Rabbit > 5000 mg/kg
LC50 Inhalation Rat 5.1 mg/l/4h

Methyl methacrylate (80-62-6)
IARC Group 3

2-Ethylhexyl acrylate (103-11-7)
IARC Group 3

Quartz (14808-60-7)
IARC Group 1
National Toxicity Program (NTP) Status Known Human Carcinogens.

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

12. ECOLOGICAL INFORMATION

Toxicity - 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)

1-Methyl-2-pyrrolidone (872-50-4)

LC50 Fish 1	832 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	4897 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	1072 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

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 Not established.

Methyl methacrylate (80-62-6)
Log Pow 0.7

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. Handle empty containers with care because residual vapors are flammable.

14. TRANSPORT INFORMATION

DOT (US)

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

IMDG

Proper Shipping Name:	PAINT
Hazard Class:	3
Identification Number:	UN1263
Label Codes:	3
Packing Group:	II
EmS-No. (Fire):	F-E
EmS-No. (Spillage):	S-E

IATA

Proper Shipping Name:	PAINT
Hazard Class:	3
Identification Number:	UN1263
Label Codes:	3
Packing Group:	II
ERG Code (IATA):	3L

15. REGULATORY INFORMATION

SARA 313 REPORTING:

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes Chronic Health: Yes Fire: Yes Reactivity: No

2-Propanol, 1,1'-[(4-methylphenyl)imino]bis- (38668-48-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

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

1-Methyl-2-pyrrolidone (872-50-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313

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

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.

1-Methyl-2-pyrrolidone (872-50-4)
U.S. - California - Proposition 65 - Developmental Toxicity WARNING: This product contains chemicals known to the State of California to cause birth defects.

16. OTHER INFORMATION

ADDITIONAL COMMENTS:
None.

DATE OF PREVIOUS SDS:
Not applicable

CHANGES SINCE PREVIOUS SDS:
New SDS.

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.