

Material Safety Data Sheet

According to ANSI Z400.1-2003

Date Printed: 04-26-2007

Section 1 - Product and Company Information

Product Name: PlastiFix Liquid

DISTRIBUTED BY:

The Easthill Group
 dba/ The Eastwood Company
 263 Shoemaker Road
 Pottstown, PA 19464

USA & Canada: 800-345-1178
 Outside USA: 610-323-2200

EMERGENCY CONTACT:
 Chem-Trec 800-424-9300

Section 2 - Hazards Identification

Appearance: Colorless liquid

Odor: Acrid, penetrating odor.

Hazards of Product:

FLAMMABLE. HAZARDOUS POLYMERIZATION MAY OCCUR.
 IRRITANT BY INHALATION, IN CONTACT WITH SKIN AND EYE, AND
 IF SWALLOWED. MAY CAUSE SENSITIZATION BY SKIN CONTACT.

Signal Word: WARNING!

Signal Word Hazard: Flammable Liquid

HMIS Rating (Scale 0 - 4)

HEALTH	2	Health = 2
FIRE	3	Fire = 3
PHYSICAL	1	Physical = 1
PERSONAL PROTECTION	G	Personal Protection = G

NFPA Ratings



Potential Health Effects

- Eye Contact:** Liquid and vapors can cause irritation (tears, blurred vision, redness) and possible corneal damage.
- Skin Contact:** May cause skin irritation (itching and soreness).
- Skin Absorption:** May cause rashes.
- Skin Sensitization:** Can cause skin sensitization.
- Inhalation:** High concentration of vapors is severe irritant to respiratory tract and may cause dizziness, headache and anaesthetic effects. It may cause elevated methemoglobin in the blood.
- Ingestion:** Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain, central nervous depression. May cause methemoglobinemia.
- Birth Defects/Developmental Effects:** Developmental toxicity observed in animal tests but only at levels toxic to the mother.

Section 3 - Composition/Information on Ingredients

Component	CAS #	Amount
Methyl Methacrylate Monomer	80-62-6	60-100%
Ethylene Glycol Dimethacrylate	97-90-5	3-7%

N, N-Dimethyl-p-Toluidine	99-97-8	0.1-1%
Benzophenone	131-67-7	0.1-1%
Dye	81-48-1	.5-1.5 ppm
4-Methoxyphenol	150-76-5	40-80 ppm

Section 4 - First-Aid Measures

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minuts. Call a physician.

Skin Contact: In case of contact, immediately wash skin with soap and water. Obtain medical attention if blistering occurs or redness persists. Wash contaminated clothing before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: If swallowed, do not induce vomiting. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

Section 5 - Fire Fighting Measures

Extinguishing Media: Chemical foam, carbon dioxide, dry chemical

Fire Fighting Procedures: Wear self contained breathing apparatus, and full protective gear. Use water spray to cool containers.

Unusual Fire and Explosion Hazards: Vapors may travel to source of ignition and flash back. Heat can cause polymerization with rapid release of energy whey may rupture container explosively. (Spontaneous polymerization may occur on prolonged storage)

Section 6 - Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Evacuate the area. Eliminate sources of ignition. Use self contained breathing apparatus and protective clothing. Dike and absorb with inert material. Transfer to proper containers for disposal, use non-sparking tools.

Personal Precautions:

Environmental Precautions:

Section 7 - Handling and Storage

General Handling: Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Keep out of reach of children.

Other Precautions: Close container after eash use. Ground container when pouring. Keep away from heat, sparks and flames.

Storage: Store in a cool dry place away from heat, sparks, flame and direct sunlight. Store in well-ventilated space. Keep container tightly closed. Check inhibitor levels every 3 months.

Section 8 - Exposure Controls / Personal Protection

Component	Source	Type	Value	Remarks
Methyl Methacrylate Monomer	ACGIH	TLV	100 ppm, 410 mg/m3, 8 hr. TWA	
Methyl Methacrylate Monomer	OSHA	PEL	100 ppm, 410 mg/m3, 8 hr. TWA	
Methyl Methacrylate Monomer	ICI		50 ppm, 205 mg/m3, 15 min. STEL	

Personal Protection

Eye/Face Protection: Safety glasses or chemical splash goggles.

Skin Protection: Impervious, nitrile.

Respiratory Protection: A NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limites. Protection provided by air purifying respirators is limited. Use self-contained breathing apparatus when needed.

Hygienic Measures: Wash face and hands thoroughly with soap and water after use and before eating, drinking, smoking or applying cosmetics.

Other Protection Measures: Provide eyewash, safety shower and impervious clothing.

Engineering Controls: Use good, local explosion-proof ventilation with a minimum capture velocity of 100 ft/min at point of monomer release.

Section 9 - Physical and Chemical Properties

Appearance: Liquid

Color: Colorless

Odor:	Acrid, penetrating odor
Flash Point:	51 C
Vapor Pressure:	28 mm Hg @ 20 C (68 F)
Boiling Point:	213 F (101 C) at 760 mm Hg
Vapor Density:	3.5 @ 60F (Air = 1)
Specific Gravity:	0.98 g/ml @ 15.5 C (60 F)
Melting Point:	-54 F (-48 C)
Solubility in Water:	27.6 WT% @ 20 C (68 F)
Partition Coefficient:	1.38

Section 10 - Stability and Reactivity

Stability/Instability: Unstable with heat

Conditions To Avoid: Temps above 70 F (21 C), ignition sources, oxidizing/reducing agents, peroxides, acids, alkalis, amines, aging & contamination. Material is a strong solvent and can soften paints and rubber.

Incompatible Materials: Reducing and oxidizing agents and UV light. Material has strong solvent properties and can soften paint and rubber.

Hazardous Polymerization: Can occur.

Hazardous Decomposition Products: Mainly oxides of carbon when burned.

Section 11 - Toxicological Information

Acute Toxicity

Ingestion

7,900 mg/Kg in rats (very low toxicity by ingestion)

Skin Absorption

LD50: >35,500 mg/Kg in rabbits (very low toxicity by contact)

Inhalation

4 hour LD50: 7093 ppm in rats (very low toxicity by inhalation)

Repeated Dose Toxicity

Repeated exposure to high levels produces adverse effects on the heart, lungs, liver and kidneys.

Section 12 - Ecological Information

CHEMICAL FATE

Movement & Partitioning

The product is predicted to have high mobility in soil.

Persistence and Degradability

Not readily biodegradable.

ECOTOXICITY

Low toxicity to fish. Harmful to aquatic invertebrates. Low toxicity to algae.

Bioaccumulation:

Product has low potential for bioaccumulation.

Section 13 - Disposal Considerations

Disposal Method:

When discarded it is listed as a hazardous waste by the EPA under RCRA U-162 with the reportable quantity of 1000 pounds (40CFR Part 302) Incinerate liquid and diking material after addition of excess inhibitor, in accordance with regulations.

Container Disposal: Disposal must be made according to official regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Methyl Methacrylate Monomer, Inhibited, 3, UN1247, PGII

Hazard Class: 3.2 (9.2)

ID Number: UN1247

Packing Group: II

Section 15 - Regulatory Information

Superfund Amendments and Reauthorization Act of 1986 (Emergency Planning and Community Right-to-Know

Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	No
Fire Hazard	Yes
Reactive Hazard	Yes
Sudden Release of Pressure	No

The following table list hazardous components and the regulatory lists for which they are required to be reported.

Component	CAS #	Amount	SARA 313 Listed	Know to California to cause cancer	Pennsylvania Hazardous Substance List	Massachusetts Hazardous Listed	Rhode Island Listed	CERCLA	EPA Cancerogenity	IARC Cancerogenity	NTP Cancerogenity	TLV Canerogenity	NIOSH Cancerogenity	OSHA Cancerogenity
Methyl Methacrylate Monomer	80-62-6	60-100%			•									

Section 16 - Other Information

Legend

- ACGIH American Conference of Governmental Hygenists
- CFR Code of Federal Regulations
- DFG Deutsche Forschungsgemeinschaft
- HMIS Hazardous Materials Identification System
- IARC International Agency for Research on Cancer
- MAK Maximum Allowable Concentration (German)
- MSDS Material Safety Data Sheet
- NFPA National Fire Protection Association
- NIOSH National Institute for Occupational Safety and Health
- OEL Occupational Exposure Limit
- RCRA Resource Conservation and Recovery Act
- STEL Short Term Exposure Limit
- TLV Threshold Limit Value
- TWA Time Weighted Average

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Material Safety Data Sheet

According to ANSI Z400.1-2003

Date Printed: 04-26-2007

Section 1 - Product and Company Information

Product Name: PlastiFix Powder, Amber

DISTRIBUTED BY:

The Easthill Group
dba/ The Eastwood Company
263 Shoemaker Road
Pottstown, PA 19464

USA & Canada: 800-345-1178
Outside USA: 610-323-2200

EMERGENCY CONTACT:
Chem-Trec 800-424-9300

Section 2 - Hazards Identification

Appearance: Yellow powder

Odor:

Hazards of Product:

WARNING! May irritate eyes, skin and respiratory tract.

HMIS Rating (Scale 0 - 4)

HEALTH	1	Health = 1
FIRE	1	Fire = 1
PHYSICAL	1	Physical = 1
PERSONAL PROTECTION	B	Personal Protection = B

NFPA Ratings



Potential Health Effects

- Eye Contact:** May be irritated by gross overexposure, no matter how generated. Keep dust out of eyes.
- Skin Contact:** May be irritated by gross overexposure, no matter how generated. May cause dryness.
- Skin Absorption:** May cause dryness.
- Inhalation:** May irritate eyes, skin and respiratory tract.
- Ingestion:** OSHA classifies the material as Particulates, not otherwise classified.

Section 3 - Composition/Information on Ingredients

Component	CAS #	Amount
Particulates not otherwise classified		60-100%
Residual monomers	NA	0.5-5.0%
Benzoyl Peroxide	94-36-0	0.5-1.5%

Section 4 - First-Aid Measures

- Eye Contact:** Flush with water for 15 minutes, including under eyelids. Get medical help if discomfort persists.
- Skin Contact:** Wash with soap and water. Get medical help if discomfort persists.
- Inhalation:** Remove to fresh air. Get medical help if discomfort persists.
- Ingestion:** Rinse mouth with water. Call doctor if amount was large.

Section 5 - Fire Fighting Measures

Extinguishing Media: Water, carbon dioxide, dry chemical.

Fire Fighting Procedures: Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust into air, producing a fire hazard and possible explosion hazard if exposed to ignition source.

Unusual Fire and Explosion Hazards: Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust.

Section 6 - Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Sweep up to avoid slipping hazard. Keep airborne particulates at a minimum when cleaning up spills.

Personal Precautions:

Environmental Precautions:

Section 7 - Handling and Storage

General Handling: Keep out of reach of children.

Other Precautions: Use in well ventilated areas. Wear gloves when handling powder.

Storage: Store in a cool dry place. Keep container closed to prevent water absorption and contamination.

Section 8 - Exposure Controls / Personal Protection

Component	Source	Type	Value	Remarks
Benzoyl Peroxide	OSHA	PEL-TWA	5 mg/m ³	
Benzoyl Peroxide	ACGIH	TLV-TWA	5 mg/m ³	
Particulates not otherwise classified	OSHA	PEL-TWA	15 mg/m ³	
Particulates not otherwise classified	ACGIH	TLV	10 mg/m ³	

Personal Protection

Eye/Face Protection: Safety glasses of chemical splash goggles.

Skin Protection: Impervious nitrile, if hot plastic is handled.

Respiratory Protection: Use type for Particulates not otherwise classified, if needed.

Hygienic Measures: Wash face and hands thoroughly with soap and water after use and before eating, drinking smoking or applying cosmetics.

Other Protection Measures: Provide eyewash, safety shower and impervious clothing are recommended.

Engineering Controls: Use good, local exhaust at processing equipment, including buffers, sanders, grinders and polishers.

Section 9 - Physical and Chemical Properties

Appearance:	Fine powder. Faint odor in bulk.
Color:	Yellow
Flash Point:	580F
Boiling Point:	NA
Vapor Density:	NA
Specific Gravity:	1.25
Solubility in Water:	Insoluble

Section 10 - Stability and Reactivity

Stability/Instability: Stable

Conditions To Avoid: Heating above 464 F (240 C)

Incompatible Materials: Strong oxidizing agents.

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Methacrylate monomer and oxides of carbon when burned.

Section 11 - Toxicological Information

Acute Toxicity

Ingestion

0.5-1.5%

Skin Absorption

0.5-1.5%

Inhalation

0.5-1.5%

Section 12 - Ecological Information

CHEMICAL FATE

Section 13 - Disposal Considerations

Disposal Method:

Dispose in a landfill or incinerate according to Federal, State and Local regulations.

Container Disposal: Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual material associated with empty containers. It is our policy to discourage the reuse of empty containers and to dispose of all empty containers properly in accordance with Federal, State and Local regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Synthetic Gum Resin Granular, NOIBN

Section 15 - Regulatory Information

Superfund Amendments and Reauthorization Act of 1986 (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

The following table list hazardous components and the regulatory lists for which they are required to be reported.

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Section 16 - Other Information

Legend

TWA	Time Weighted Average
ACGIH	American Conference of Governmental Hygenists
CFR	Code of Federal Regulations
DFG	Deutsche Forschungsgemeinschaft
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
MAK	Maximum Allowable Concentration (German)
MSDS	Material Safety Data Sheet
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
OEL	Occupational Exposure Limit
RCRA	Resource Conservation and Recovery Act
STEL	Short Term Exposure Limit

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.