Home Product Catalog About Us Chemical Epoxy Coatings Flooring Installation Joints Resistant

Mortars & Grouts Primers & Sealers Specifier's Info

Structural Waterproofing MSDS & Tech Data Ordering Info

The Right Product for the Right Job Since 1980



[Contact Us]

# **Epoxy.com Product #698**

Methyl Methacrylate (MMA) Binder Resin

Fast Curing, Flexible, Resistant to Aging Ideal for Outdoors, or When a Quick Cure is Required

## **Description**

**Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin** is a 100% reactive, low viscosity, flexible methyl methacrylate resin for use as a binder for low resin content troweled mortars and polymer concrete. The resin is ideal for making repairs and to change the slope on floors, bridge decks and joint headers.

The polymer concrete system based on **Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin** hardens rapidly after the addition of **Epoxy.com Product #695 BPO Hardener Powder**. The mortar is suitable for indoor and outdoor areas subject to heavy vehicular and equipment traffic.

## **Advantages**

- Flexible and Resistant to Aging.
- Very Fast Curing Typically Hardens in 1 hour or less.
- VOC Compliant Zero VOCs
- Can Be Used Even at Lower Temperatures
- Can be Formulated to be Placed up to 2.5 Inches Thick.

### **Considerations**

- Moisture Vapor Transmission must be less than 3 lbs per ASTM-F-1869 and less than 80% RH per ASTM F-2170.
- On or below grade installation must have an efficient vapor barrier under the slab (minimum 10-15 mil).
- Do not store outside in direct sunlight, storage temperature must be less than 80° F.
- Concrete must be dry, free of dirt, waxes, curing agents and other foreign materials.

## Composition

Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin is a 100% reactive methyl methacrylate resin.

## **Surface Preparation**

Good surface preparation is the first necessary step to successful installation of all Resinous Flooring System. All substrates must be clean and free of all oil, grease, paint, dirt sealers laitance and any other foreign matter that may interfere with proper bonding. Follow the directions for surface preparation as outlined in <u>Epoxy.com Surface Preparation Guide</u>.

### **Color Selection**

Supplied as a clear binder. Color packs are available in selected colors. Color pack mix ratio is 1 QT color pack per 5 gallon pail of **Epoxy.com Product #697 Methyl Methacrylate (MMA) Binder Resin**.





## Product #698 Methyl Methacrylate (MMA) Resin Data

Appearance

Bluish tint, low viscosity
Viscosity @ 73.5°F, cps

140-150 cps

Weight per Gallon

Solids Content

Pot Life (working time) 73°F

Compressive Strength (filled mortar), psi

Tensile Strength (filled mortar), psi

Bluish tint, low viscosity

140-150 cps

8.1 lbs.

20-25 min.

3,500-4,000 psi

800-1,000 psi

## **Epoxy.com Product #698 MMA Binder Formulation Guide**

**Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin** requires the adding of **Epoxy.com Product #695 Hardening Powder.** to start the hardening process. The amount of hardener must be adjusted to the respective surface temperature (see table below). At temperatures below 40°F, Epoxy.com Product #696 Accelerator must be used in addition to the amount of hardener used at the 40°F level (about 0.5% @ 32°F up to 3%. @ -20°F).

# Epoxy.com Product #698 MMA Binder Resin - Typical Batch Formula for Blended Mortar Aggregate Polymer Concrete (PC)

Temp. (°F) of Resin, Air & Floor Surface	Hardener % by Wt. Based on Wt. of #698 Resin	Hardener by Vol. (oz.) Based on Gallon of #698 Resin	Pot Life (min.)	Hardness Time (min.)
+41	6.0	10.8	Approx. 25	Approx. 55
+50	4.0	7.5	Approx. 20	Approx. 45
+68	2.5	4.5	Approx. 20	Approx. 45
+86	1.0	1.8	Approx. 20	Approx 45

#### Typical Batch Size for Epoxy.com Product #698 MMA (MMA) - Self-Leveling

Material	% Parts by Wt	Wt.	Volume
#698 Resin	14.0	8.1 lbs	1.0 gal.
#82 Blended Mortar Aggregate	85	50 lbs	3.25 gal
Pigment Pack	n/a	n/a	6.4 vol. oz.
#695 BPO Hardener	Varies by temp	Varies by temp	Varies by temp

**Yield:** ±3.0 gal Mortar (0.4 Cubic Foot)

#### Additional Aggregate for Greater than 1/2 inch - Additional Aggregate per Gallon of #698 MMA Binder

Thickness of placement	Aggregate Size	Weight %	Weight	Vol.	Yield
Less than ½ inch	No Additional	n/a	n/a	n/a	0.4 cu ft
½ to 1 inch	1/8" x 1/16"	25%	12.0 lbs	0.9 gal	0.49 cu ft
1 to 2 inch	1/16" x 3/8"	50%	24.0 lbs	1.8 gal	0.57 cu ft
Greater than 2 inches	3/8" x 5/8"	75%	36.0 lbs	2.7 gal	0.63 cu ft

### Installation

**Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin** requires the adding of **Epoxy.com Product #695 Hardening Powder.** to start the hardening process. The amount of hardener must be adjusted to the respective surface temperature (see table below). Mix Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin and **Epoxy.com Product #695 BPO Hardener Powder** for 3 minutes until no lumps are present. Add the additional aggregates to extend the mortar. Apply to the primed surface using as trowel or a gauge rake.

**Epoxy.com Product #698 Methyl Methacrylate (MMA) Binder Resin** requires a top coating with Epoxy.com MMA or Epoxy.com Sealer appropriate for the flooring application. Contact Epoxy.com Technical Support Department for more information.

## **Availability**

Contact Epoxy.com Customer Service Department

### **Storage**

Store in a cool and dry place, below 80°F, out of direct sunlight. Do not store near open flame or food. Shelf life is 4-6 months in the original unopened containers

## **Technical Support**

Call Epoxy.com Technical Support Department with any technical support questions.

Proper mixing and installation is critical to the optimal success of all product. See <u>Installation Tips</u>, <u>Techdata</u>, & <u>MSDS</u> for more details on our products. Be sure to contact us with any questions and/or concerns that you have.

For more information please contact:

### Epoxy.com

A Division of Epoxy Systems, Inc 20774 W. Pennsylvania Ave. Dunnellon, Florida 34431 <u>Hundreds of Systems</u>, Since 1980 - Over 33 years Florida & Vermont USA

Customer and Technical Support Hours: 9AM-4PM Eastern Time (6AM-1PM Pacific Time). Closed 12 Noon-1PM Eastern Time for Lunch

321-206-1833 Customer Service - Ordering and Order Status Katey Fontaine, VP - Customer Service Director sales@epoxy.com

Technical Support
352-533-2167 Norm Lambert, President - Technical Support Director
info@epoxy.com

352-489-1666 Accounting and Administration Debby Lambert, CEO, and CFO office@epoxy.com

352-489-1625 Fax line to all Departments



Copyright © 1994-2015 - Epoxy Systems Inc. DBA Epoxy.com - Commercial, Industrial, and Residential Resins Since 1980

Home Sales Terms MSDS & Tech Data Online Ordering Authorization Form Add this page to Favorites

Secure Login