Medium Viscosity Methyl Methacrylate (MMA) Sealer and Top Coating

Epoxy.com Product #690

Ideal Sealer for Top Coating for MMA Flooring used in Food and Beverage Plants, Dairies, or Other Wet Surfaces with Food and Fat Contamination

Description

Epoxy.com Product #690 Medium Viscosity Methyl Methacrylate (MMA) Sealer and Top Coating is a 100% reactive, medium viscosity methyl methacrylate resin developed as a sealer/topcoat over Epoxy.com Product #697 and Epoxy.com Product #698 Methyl Methacrylate (MMA) Flooring and Decking Systems.

Advantages

- Fast Cure - Less than 1 hour
- Suitable for USDA food handling areas
• Higher Temperature Resistance
• Superior Fat Resistance.
• Medium Viscosity - excellent filling properties
• Can be installed over a wide range of temperatures
• 100% Reactive - VOC Compliant

Considerations

• Concrete must be clean and free of all oil, grease, paint, dirt, sealers, laitance and any other foreign material that might interfere with proper bonding.

• Do not store Epoxy.com Product #690 Medium Viscosity Methyl Methacrylate (MMA) Sealer in direct sunlight, storage temperature must be less than 80 ° F.

• On or below grade applications should have a moisture vapor barrier under the slab. Maximum vapor transmission must be less than 3 lbs per ASTM F-1869 and less than 80% RH per ASTM F-2170.

• Maintain coating thickness at 10-20 mils (80-160 Square Feet per Gallon) to prevent yellowness and possible cracking.

• Do not use over Epoxy.com Product #692 Flexible Methyl Methacrylate (MMA) Flooring.

Composition

Epoxy.com Product #690 Medium Viscosity Methyl Methacrylate (MMA) Sealer is a 100% Solids Methyl Methacrylate (MMA).

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 Epoxy.com Surface Preparation Guide.

Color Selection

Can be used clear (with a slight blue tint). Color packs are available in selected colors. Color pack mix ratio is 1 QT color pack per 5 gallon pail of Epoxy.com Product #690 Medium Viscosity Methyl Methacrylate (MMA) Sealer and Top Coating Resin.

Mixing and Installation

Epoxy.com Product #690 Low Viscosity Methyl Methacrylate (MMA) Sealer and Top Coating 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, contact Epoxy.com Technical Support for a recommended dosing.

In order to achieve the best curing it is necessary to apply Epoxy.com Product #699 Low Viscosity Methyl Methacrylate (MMA) Sealer with a short nap roller. Coating thickness should be a minimum of 10 mils and maximum of 20 mils (80-160 sq ft/gal.) depending on the profile of the base material. One hundred (100) sq ft/gal. is average. If the coating exceeds 20 mils, the top coat may remain visibly blue or yellow and surface cracks are possible. It is best to spread material with a notched trowel or squeegee to the desired thickness, and roll in one direction, then roll in a 90° pattern. This will reduce the occurrence of roller marks in the top coat.

<table>
<thead>
<tr>
<th>Temp. (°F) of Resin, Air &amp; Floor Surface</th>
<th>Hardener % by Wt. Based on Wt. of #699 Resin</th>
<th>Hardener by Vol. (oz.) Based on Gallon of #699 Resin</th>
<th>Pot Life (min.)</th>
<th>Hardness Time (min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+40</td>
<td>2.0</td>
<td>3.5</td>
<td>Approx. 30</td>
<td>Approx. 50</td>
</tr>
<tr>
<td>+50</td>
<td>1.5</td>
<td>2.7</td>
<td>Approx. 25</td>
<td>Approx. 40</td>
</tr>
<tr>
<td>+60</td>
<td>1.5</td>
<td>2.7</td>
<td>Approx. 20</td>
<td>Approx. 20</td>
</tr>
<tr>
<td>+70</td>
<td>1.0</td>
<td>1.8</td>
<td>Approx. 10</td>
<td>Approx. 15</td>
</tr>
</tbody>
</table>

Epoxy.com recommends waiting 2 hours between coating and sealing. Coating work has to be continued after the complete hardening of the previous layer.
Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Material</td>
<td>Methyl Methacrylate Resin (MMA)</td>
</tr>
<tr>
<td>Percent Reactive</td>
<td>100%</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear Low Viscosity Liquid (with slight blue cast)</td>
</tr>
<tr>
<td>Viscosity, cps@ 73°F</td>
<td>380-390</td>
</tr>
<tr>
<td>Weight per Gallon</td>
<td>8.3 lbs</td>
</tr>
<tr>
<td>Recoat Time</td>
<td>2 hours±</td>
</tr>
<tr>
<td>Pot Life Min (Varies with Temp)</td>
<td>10-30</td>
</tr>
<tr>
<td>Cure Rate (min)</td>
<td>10-30</td>
</tr>
<tr>
<td>Heat Resistance</td>
<td>216°F</td>
</tr>
<tr>
<td>Shore D Hardness</td>
<td>75-80</td>
</tr>
</tbody>
</table>

Cleanup

Clean tools and equipment with lacquer thinner or MEK. Consult Material Safety Data Sheet for safety and health precautions.

Coverage

100 square feet per gallon, average.

Availability

Contact Epoxy.com Customer Service Department

Maintenance

Epoxy.com Product #690 Low Viscosity Methyl Methacrylate (MMA) Sealer is considered to be a very low maintenance flooring system. With some textures and conditions it may have to be cleaned by bristle brush or low pressure wash. Due to the thermoplastic character of Methyl Methacrylate (MMA) resins, you may get black marks from fork lifts and tire skidding.

Storage

Store Epoxy.com Product #690 Medium Viscosity Methyl Methacrylate (MMA) Sealer 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.

Tips

Adequate cross ventilation should be provided. Good ventilation during the processing ensures a good cross linking and hardening. Read, understand and follow Material Safety Data Sheets and Application Instructions prior to use.

Use only as directed. If substrate and/or material temperature is above 90°F, DO NOT apply material.

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 Installation Tips, Techdata, & MSDS 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
Hundreds of Systems,
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