



# ChemMasters®

SPECIALTY CONSTRUCTION PRODUCTS

# Polytops MMA Grout

Methyl Methacrylate Grout

## P R O D U C T D A T A

### DESCRIPTION

**Polytops MMA Grout** is a three component, methyl methacrylate based grout. **Polytops MMA Grout** sets very rapidly even in freezing temperatures to minimize downtime. It develops very high strength rapidly. When mixed, **Polytops MMA Grout** forms a flowable, non-shrink, durable polymer grout that has very high bond, compressive and flexural strength, resists freeze thaw damage, and has excellent chemical resistance.

### USES

- Grouting of bearing plates on bridges and trestles
- Rehabilitation of bridge decks, airport runways, and expansion joints
- Column grouting

### ADVANTAGES

- For full bearing of base plates
- Self leveling for ease of placement
- Wide range of temperature applications from 0° to 110°F (-12° to 30°C)
- Cures rapidly for emergency grouting applications
- Develops high compressive, tensile, and flexural strengths; withstands high levels of abrasion and impact loading
- Excellent bond to existing concrete
- Flexibility to withstand vigorous thermal cycling
- Freeze thaw resistant
- Excellent resistance to acids and alkalizes
- Exceptional ultraviolet light stability

Packaging/Part Number	
6 gallon (78 lb) package containing: 70 lb (32kg) aggregate Part C, 14 ounces (0.414 ml) catalyst Part B, 1 gal (3.8L) MMA monomer Part A	F5370.78

### TECHNICAL DATA

USDA approved for incidental contact in federally inspected meat, fish and poultry plants.

### Test Data

AASHTO T237 Pot Life @70°F (21°C)	20 to 30 minutes
Elongation	3 to 5%
Yield Neat Extended with 25 lbs #8 pea gravel	0.58 ft <sup>3</sup> 0.75ft <sup>3</sup>
ASTM C 109 Compressive Strength Neat 1 hour @ 19°F 1 hours @ 70°F 3 hours @ 70°F 24 hours @ 70°F  Extended 1 hour @ 19°F 1 hour @ 100°F 24 hours @ 70°F	3,850 psi 5,500 psi 7,100 psi 7,700 psi  6,650 psi 3,520 psi 8,500 psi
ASTM C881 Bond Strength 7 days Neat Extended	3,790 psi 2,670 psi
AASHTO T97 Flexural Strength 7 days Neat Extended	3,440 psi 3,070 psi
AASHTO T198 Tensile Strength 7 days	2,330 psi

### DIRECTIONS

**Surface Preparation:** Concrete must be free of coatings, dirt, oil, or other contaminants. Concrete must be frost free and dry. Sandblast all exposed reinforcing steel to remove all rust. Prepare forms when needed.

**Priming:** It is preferable, but not required, to prime surfaces with **Duraguard 400 Primer** before installing **Polytops MMA Grout**. When using the primer coat follow the directions on the **Duraguard 400 Primer** label or refer to the Product Data Sheet available at [www.chemmasters.net](http://www.chemmasters.net).



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### When mixing one full unit:

- Use a heavy duty 1/2" or larger drill equipped with a jiffler type mixing prop.
- Pour **Part A Monomer** into a clean container with a minimum capacity of 6 gallons (22.7 L).
- If the temperature is above 50°F (10°C), add 7 oz (207 ml) of **Part B Catalyst** to the **Part A Monomer**. At lower temperatures or where extremely fast set is desired, add up to 14 oz (414 ml) of catalyst.
- Determine working time using 7 oz (207 ml) of catalyst before using higher levels of catalyst. Use additional levels depending on results and requirements of job.
- Adding additional catalyst reduces the pot life and set time of the material. Add the catalyst and mix for 1 minute.
- Avoid incorporating excess air into the mix. Add all of the premeasured **Part C Aggregate** slowly while continuing to mix the grout. Blend until all aggregate is coated and thoroughly wet out.

### When mixing more than one unit:

- A mortar mixer is recommended.
- Add **Part A Monomer** to the mixing vessel first
- Blend in the appropriate amount of **Part B Catalyst** (see above)
- Mix until **Part B Catalyst** is completely dissolved.
- Add the **Part C Aggregate** while mixer continues and blend the mix for 1-2 minutes.
- Avoid incorporating excess air into the mix. Add all of the premeasured **Part C Aggregate** slowly while continuing to mix the grout. Blend until all aggregate is coated and thoroughly wet out.

**Application:** Prepare a form for **Polytops MMA Grout** and pour the material into place.

### Cleanup:

When operations are completed or interrupted for more than 15 minutes, the mixing vessel and application tools must be cleaned. Clean tools and equipment before material dries and sets with xylene, xylol or the **Part A Monomer** of the **Polytops MMA Grout kit**. If the monomer is used for cleaning, it can be saved and used for the next mix or saved for future cleaning. Adding coarse aggregate to the mixer while cleaning aids in removing the polymer grout.

### STORAGE

Store factory sealed containers of unmixed material at 50° to 75°F (10° to 21°C) temperatures away from direct sunlight and sources of heat. Temperatures in excess of 75°F (21°C) cause premature aging of the material. Shelf life of properly stored material is two years from date of manufacture.

### LIMITATIONS

- **Polytops MMA Grout** is exothermic, generating a large amount of heat when initially mixed. After mixing immediately pour all of the material to dissipate heat.
- It is important to use all of the **Part A Resin** and **Part C Aggregate** provided in each unit to obtain proper mix ratio and consistency
- **Polytops MMA Grout** is extremely fast setting. Substrate and forms must be ready as needed before material is mixed
- Good ventilation of the repair area is recommended to aid in the thorough cure of **Polytops MMA Grout**

### CAUTIONS

**Flammable Liquid:** Keep away from heat or open flames. Use with ventilation. May cause skin, eye and respiratory tract irritation. Do not take internally.

### KEEP OUT OF REACH OF CHILDREN

**Organic Peroxide:** Keep away from all sources of heat including sunlight. Causes eye, skin, and respiratory tract irritation. May cause allergic skin reaction. Do not take internally.

All label precautions and the SDS must be fully understood before using this product.

**Make certain that the most current versions of the product data sheet and SDS are being used. Go to [www.chemmasters.net](http://www.chemmasters.net) or contact ChemMasters customer service at 1.800.486.7866 to verify the most current version.**

Proper application is the responsibility of the user. ChemMasters can only make technical recommendations and cannot provide quality control on the jobsite.

### This Product is Formulated and Labeled for Industrial and Commercial Use Only

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT. We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.