



# ChemMasters

## DURAGUARD 400 mMa

METHYL METHACRYLATE PRIMER



SPECIALTY CONSTRUCTION PRODUCTS

### P R O D U C T      D A T A

#### DESCRIPTION

**Duraguard 400 mMa** is a low viscosity, penetrating, fast-setting methyl methacrylate primer required for use as a primer on all Duraguard mMa series systems. **Duraguard 400 mMa's** two components include **Duraguard 400 Resin** and **Duraguard mMa Catalyst**.

An accelerator additive, **Duraguard mMa-Accelerator** is available for **Duraguard 400 mMa** for use in cold temperature applications. A bond enhancer, **Duraguard mMa-I Component** is also available for use with **Duraguard 400 mMa**. **Duraguard mMa-I Component** is recommended for use in all applications to improve the bond of the primer. The **I Component** is particularly important in areas where the substrate is not porous or where excessive dampness or chemical contamination is suspected.

#### USE

- **Duraguard 400 mMa** is used to anchor all ChemMasters' methyl methacrylate flooring systems. **Duraguard 400 mMa** is used on any horizontal or vertical concrete or wood surface. **Duraguard 400 mMa** bonds to properly prepared concrete with a strength that exceeds the cohesive bond of the concrete itself.

#### ADVANTAGES

- Superior adhesion to properly prepared substrates
- Excellent bond strength to methyl methacrylate coatings and toppings
- Cures rapidly (less than 1 hour) for minimal downtime
- May be applied at extremely low temperatures
- Exceptional flexibility and tensile strength to withstand impact and shear stresses
- VOC compliant - 100% solids
- Meets USDA / FDA standards for floor coatings
- Seamless - no cold joints
- UV stable for exterior applications

#### TECHNICAL DATA

V.O.C. Content:	0 gm/L
Density	8.2 lbs./gal
Viscosity (ASTM D2393)	120-150 cps
Solids	100%
Application Temperature	-20°F to 95°F
Pot Life	15-25 minutes
Cure Time	1-2 hours
Hardness (ASTM D2240), Shore D	83
Water Absorption (ASTM D570)	<0.1%
Tensile Strength (ASTM D638)	4,250 psi
Elongation @ Break (ASTM D638)	3%
Mandrel Flexibility @ 1/8"/0.32cm	Passes
Chemical Resistance	see chart

#### PACKAGING

**Duraguard 400 mMa** primer consists of the following components:

- **Duraguard 400 mMa Resin** is sold available in 5 gallon pails or 55 gallon drums.

- **Duraguard mMa Catalyst** is sold in 5 or 55 pound boxes

Other components used with **Duraguard 400 mMa** are

- **Duraguard mMa-I Component** - available in 1 gallon cans, 5 gallon pails or 55 gallon drums

- **Duraguard mMa Accelerator** - available in 1 gallon jugs.

All components are sold separately.

#### ESTIMATING GUIDE

PRIMER:	15 mils	100 Ft. <sup>2</sup> /gal
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## ChemMasters

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## DIRECTIONS

**SURFACE PREPARATION:** This is the most critical step in any coating application. All concrete must be a minimum of 28 days old and mechanically profiled. Refer to Duraguard mMa Surface Preparation Guide for complete instructions.

**Bond Test:** Prior to application of the primer, bond test shall be conducted to determine if the surface preparation is adequate. The bond of the primer to the substrate should be greater than the tensile strength of the substrate. See Bond Test Instructions in the Surface Preparation Guide for details.

**MIXING:** The amount of **Duraguard mMa Catalyst** required for each gallon of **Duraguard 400 mMa Resin** is dependant on the surface temperature of the floor. Mixing too much catalyst will cause the material to set extremely quickly and may result in improper bonding to concrete. Insufficient catalyst may prevent proper curing Refer to Duraguard mMa Mixing Chart to ensure proper catalyst dosing.

**Duraguard mMa-I Component** should be added to enhance the bonding properties of the primer. **Duraguard mMa Accelerator** is used in applications at temperatures below 40°F. Refer to Duraguard mMa mixing chart for details on dosing of these components.

**Duraguard 400 mMa** must be thoroughly mixed before application. Add the appropriate amount of **Duraguard mMa Catalyst** for each gallon (liter) of **Duraguard 400 mMa Resin**. Add the appropriate amount of **Duraguard mMa-I Component** and / or **Duraguard mMa-Accelerator** if applicable. Mix for 30 seconds using a mechanical drill equipped with a spiral type mixing prop. Take care not to incorporate excess air into the mix.

**APPLICATION:** Immediately pour all of the mixed **Duraguard 400 mMa** onto the prepared concrete, spread with a serrated squeegee maintaining a 15 mil wet film thickness, then backroll into place with a short nap, solvent resistant roller.

**RECOAT:** Subsequent application of body coat or topcoat can proceed only after **Duraguard 400 mMa** is completely tack free. The primer is fully cured when it has a uniform flat finish (normally one to two hours after placement). Any remaining glossy areas after the primer has dried indicates there is insufficient primer in these areas (less than 15 mils). These areas should be re-primed prior to applying additional coats. See selected top coat for additional recoat information.

## CLEANUP

Clean tools and equipment before material dries and sets with xylene or xylol.

## LIMITATIONS

- All methyl methacrylate installations require good ventilation. Proper ventilation assures that the mMa vapors, which are heavier than air are removed from the surface of the floor. Removal of these vapors allows the for a hard continuous film to form at the surface
- **Duraguard 400 mMa** is not designed for application in direct sunlight. The topping may blister or pinhole due to out gassing of air in the concrete and high substrate temperatures.
- **Duraguard 400 mMa** is exothermic, generating a large amount of heat when initially mixed. A large mass of material can ignite. Immediately after mixing pour all of the material onto the floor to dissipate the heat.
- Exposure to excessive heat may cause premature gelling and reduce the working time.
- **Duraguard 400 mMa** is extremely fast setting. Floors must be completely prepared and ready before material is mixed.
- Good ventilation of the repair area is strongly recommended to aid in the thorough cure of **Duraguard 400 mMa**.
- **Duraguard 400 mMa** is not designed as a stand alone coating and is not a traffic bearing coating.

## STORAGE

Store factory sealed containers of unmixed material at 50°-75°F (10°-24°C) temperatures away from direct sunlight and sources of heat. Temperatures in excess of 75°F (24°C) cause premature aging of the material. Shelf life of properly stored material is one year from date of manufacture.

## CAUTION

**FLAMMABLE LIQUID:** Keep away from heat or open flames. Use with adequate 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. Keep out of reach of children.

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

### ***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.