

# DIAMOND POLYMERS

## DP162 – TECHNICAL DATA POWER TROWEL PRIMER

### PRODUCT DESCRIPTION:

DP162 is a two component 100% solids epoxy mortar primer designed for use as the base coat when installing a power troweled epoxy floor overlay. This product helps reduce application time and effort while providing excellent adhesion between the substrate and epoxy overlay.

### RECOMMENDED FOR:

Recommended for priming cement and concrete substrates before an epoxy mortar overlay installation.

### NOT RECOMMENDED FOR:

Immersion applications for all acids and chemicals.

### SOLIDS BY WEIGHT:

100%

### VOLATILE ORGANIC CONTENT:

Zero pounds per gallon

### COLORS AVAILABLE:

Amber clear

### RECOMMENDED FILM THICKNESS:

6-10 mils

### COVERAGE PER GALLON:

160-267 sq. ft. @ 6-10 mils

### PACKAGING INFORMATION

3 gallon and 15 gallon kits: (3 gallon kit= 2.7 gallons; 15 gallon kit= 13.6 gallons) (volumes approximate)

### MIX RATIO:

The mix ratio is two parts A to one part B by volume (8.0# part A to 4.0# part B) (volumes approximate)

### SHELF LIFE:

1 year in unopened containers

### FLEXURAL STRENGTH:

10,800 psi @ ASTM D790

### COMPRESSIVE STRENGTH:

8,150 psi @ ASTM D695- 1/2" x 1/2" bars

### TENSILE STRENGTH:

6,800 psi @ ASTM D638

### ADHESION:

340 psi @ elcometer (concrete failure, no delamination)

### ULTIMATE ELONGATION:

3.6%

### ELEVATED TEMP. RESISTANCE:

No slip or flow at 158°F (mil-D-3134J sec 4.6.3.1)

### HARDNESS:

Shore D= 77

### GARDNER VARIABLE IMPACTOR:

Gardner impact, direct and reverse= 60 in. lb. (passed)

### VISCOSITY:

Mixed = 600-800 cps (typical)

### DOT CLASSIFICATIONS:

Part A not regulated

Part B "FLAMMABLE LIQUID N.O.S., 8, UN1993, PGIII"

### CURE SCHEDULE: (70°F)

pot life – 1 1/2 gallon volumes .....20-30 minutes  
tack free (dry to touch).....4-6 hours  
topcoat..... immediately (see application/reverse)  
light foot traffic.....n/a  
full cure (heavy traffic).....2-7 days

### APPLICATION TEMPERATURE:

50-90 degrees F

### CHEMICAL RESISTANCE:

REAGENT	RATING
xylene	B
1,1,1 trichloroethane	C
MEK	A
methanol	A
ethyl alcohol	B
skydrol	B
10% sodium hydroxide	D
50% sodium hydroxide	C
10% sulfuric acid	B
70% sulfuric acid	A
10% HCl (aq)	C
5% acetic acid	B

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

### PRIMER:

None required

### TOPCOAT:

Epoxy mortar power trowel overlay (hand troweled overlays are also acceptable.)

### LIMITATIONS:

- \*Color stability may be affected by environmental conditions such as high humidity or chemical exposure.
- \*Colors may vary from batch to batch.
- \*Do not use this primer as a primer for coatings as this primer is intended for epoxy mortar overlays.
- \*Apply the epoxy mortar overlays directly to the wet primer. Do not allow primer to become tack free.
- \*Substrate temperature must be 5°F above dew point.
- \*All new concrete must be cured for at least 30 days prior to application.
- \*See reverse side for application instructions.
- \*Test data based on neat resin.
- \*Physical properties are typical values and not specifications.
- \*See reverse side for limitations of our liability and warranty.

- 1) **PRODUCT STORAGE:** Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be above 55°F to prevent product crystallization.
- 2) **SURFACE PREPARATION:** All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. We recommend that an aggressive shot blast be performed prior to the application of this product. A less adequate method would be acid etching, but the etch should properly profile the substrate. All edges and around columns or beams should be mechanically scarified. All termination points should not be feather edged, but should be saw cut with the termination ending at the saw cut. All large cracks should be V cut and filled with an appropriate crack filler. All expansion joints should be filled with an appropriate joint filler. When overlaying an expansion joint, a single saw cut though the epoxy overlay will prevent random fracturing. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.
- 3) **PRIMER:** This material is self-priming for use with subsequent epoxy mortar power trowel or hand trowel overlays.
- 4) **PRODUCT MIXING:** Mix the liquids in an oversized container thoroughly and until streak free. No induction time is necessary. The mix ratio is two to one by volume. Improper mixing may result in product failure.
- 5) **PRODUCT APPLICATION:** Apply the mixed material to the substrate with a brush or roller at the recommended thickness. While the primer is still wet, apply the epoxy overlay over the wet power trowel primer. Follow the procedures for placing the epoxy mortar overlay from the appropriate technical data sheet. Maintain temperatures within the recommended ranges during the application and curing process. If the epoxy primer tacks off before applying the epoxy mortar overlay, check for an epoxy blush and clean as necessary. Re-apply the power trowel primer over the previous primer and apply the epoxy mortar overlay before the primer tacks off.
- 6) **RECOAT OR TOPCOATING:** Topcoat with an epoxy mortar overlay. This product is only intended for use as a primer for epoxy mortar overlays only.
- 7) **CLEANUP:** Use xylol
- 8) **FLOOR CLEANING:** Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.
- 9) **RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

## NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

*We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Listed physical properties are typical and should not be construed as specifications. **NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT.** We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may **CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.***