PPG Protective & Marine Coatings

MEGASEAL™ WBPC

Waterborne epoxy primer/sealer

Product Data/Application Instructions

- Zero VOC
- Easy to apply
- Low Gloss
- Low odor
- Easy soap and water clean up
- Excellent adhesion to acid-etched concrete.
- Suitable for new concrete or refurbishment

MegaSeal WBPC is a low viscosity, waterborne two component epoxy primer/sealer. MegaSeal WBPC enhances adhesion by penetrating into the concrete substrate and helps reduce bubbling and pinholes that may occur when coating porous surfaces.

Typical Uses

- Food and beverage processing facilities
- Electronic equipment plants
- Industrial and commercial warehouses
- Laboratory floors
- Pharmaceutical plants

MegaSeal WBPC is for use over prepared concrete. It is ideal for use on porous concrete or over a rough surface profile.

MegaSeal WBPC is normally topcoated with MegaSeal SL. Consult your sales representative for other recommendations.

Recommended Systems

Service	Primer	MegaSeal SL	MegaSeal SL Clear
Decorative	MegaSeal WBPC	MegaSeal SL (10 mils)	(Optional)
Mild	MegaSeal WBPC	MegaSeal SL (20 mils)	(Optional)
Moderate	MegaSeal WBPC	MegaSeal SL (30 mils)	(Optional)

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(Supersedes 12/2007)

Products

99-12800	Clear Resin
99-12833	Cure

Physical Data

Finish	Low Gloss	
Color*	Clear	
Components	2	
Curing mechanism	Chemical reaction between components	
Volume solids (calculated)	35% ± 3%	
DFT per coat	mils	microns
	2 to 4	50 to 100
Coats	1	
Theoretical coverage**	ft^2/gal	m^2/L
2 mils (50 microns)	280	6.8
4 mils (100 microns)	140	3.4
Temperature resistance, dry	200ºF (93ºC)	
VOC (calculated)	0.04 lb/gal	4 g/L
Flash point (SETA)	°F	°C
99-12833	200	93
99-12800	200	93

**MegaSeal WBPC is subject to color change upon aging especially if exposed to direct sunlight. There may be minor variations in color from batch to batch. Change batches at natural breaks or transitions, or intermix batches for consistency.*

***Coverage will vary, depending on density or porosity of concrete, and application method.*

MegaSeal WBPC Chemical Resistance Guide

Environment	Splash and Spillage	Fumes and Weather
Acidic	F	G
Alkaline	E	E
Solvents	E	E
Salt solutions		
Acidic	G	VG
Neutral	E	E
Alkaline	E	E
Water	E	E

F-Fair G-Good VG-Very Good E-Excellent
This chart shows typical resistance of MegaSeal WBPC. Contact your sales representative for your specific requirements.

Surface Preparation

Coating performance is proportional to the degree of surface preparation. Concrete surfaces must be clean and dry and free of contaminants such as dust, dirt, grease, or oil.

New/Bare Concrete – Refer to SSPC-SP 13/NACE No. 6 surface preparation of concrete for detailed information regarding surface preparation of concrete. In general, concrete must have sufficient profile to achieve satisfactory adhesion of primer and topcoat. Concrete must be in sound condition and free of all coatings, curing compounds, oil and other contaminants. New concrete must cure a minimum of 28 days prior to application of any coatings.

Concrete can be abrasive blasted (ASTM D4259) or mechanically abraded to achieve a profile equal to 60 grit sandpaper or coarser. Moisture vapor transmission should be 3 lbs. or less over a 1000 sq. ft. area during a 24 hour period, measured and confirmed through a calcium chloride test. Concrete should have a minimum surface tensile strength of 300 PSI verified by a pull-off adhesion test. Should concrete not meet moisture vapor transmission or tensile strength requirements, contact your local sales representative for guidance. Slabs on grade that do not have an appropriate moisture barrier installed may be subject to seasonal moisture migration that can result in coating disbandment. Consult the following ASTM methods: ASTM-4263 – plastic sheet method for checking moisture in concrete; ASTM 4258 standard practice for cleaning concrete; ASTM 4259 standard practice for abrading concrete; ASTM 4260 standard practice for etching concrete.

Previously Painted Concrete – Old coatings and concrete must be in sound condition. Surfaces must be clean and dry and free of all contaminants such as dust, dirt, grease, or oil. Old coatings must be uniformly abraded to achieve satisfactory adhesion. Apply a test patch to the abraded surface and allow to cure a minimum of one week before testing adhesion. If adhesion is poor, or if the old coatings are peeling, chipping, or are otherwise in poor condition, remove the coatings down to bare concrete and prepare the bare concrete as shown above.

Application Data

Applied over	Prepared concrete
Surface Preparation	ASTM D4260 or 4259
Method	Pour and spread – squeegee and backroll
Mixing ratio (by volume)	4 parts resin to 1 part cure

Environmental conditions

Temperature	ºF	ºC
air	55 to 95	13 to 35
surface	55 to 95	13 to 35
material	55 to 95	13 to 35

Surface temperatures must be at least 5ºF (3ºC) above dew point to prevent condensation. Relative humidity must not exceed 85%.

Pot Life (hours)	ºF/ºC		
	90/32	70/21	55/13
	1.5	2	2.5

Mixed MegaSeal WBPC will remain liquid beyond its pot life, but should not be applied after the pot life has expired.

Drying time (hours, @ 2 mils DFT, 50% RH)

	ºF/ºC		
	90/32	70/21	55/13
touch	1	2	3
through	12	24	36
full cure	7 days	7 days	10 days

Recoat/Topcoat time (hours, @ 2 mils DFT, 50% RH)

	ºF/ºC		
	90/32	70/21	55/13
Recoat/Topcoat, min	4.5	6	8
Recoat/Topcoat, max**	24	48	72

**Roughen surface if maximum recoat/topcoat time has been exceeded.

Application Equipment

The following is a guide. Adjustments in application equipment or technique may be necessary to accommodate varying field conditions.

Squeegee – Flat or notched rubber squeegee (depending upon DFT required) with EPDM rubber blade, available from manufacturers such as Midwest Rake Co.

Rollers – 3/8 inch lint-free roller with phenolic core for backrolling, and 7/16 inch sharp-tipped spiked roller for air release and leveling, available from manufacturers such as Midwest Rake Co.

Mixing

MegaSeal WBPC is a two-component coating. Stir resin thoroughly to disperse pigment before mixing with cure. Add cure to resin and mix slowly until uniformly blended. **Do not mix at high speed, air entrainment will occur**. MegaSeal WBPC is ready for use immediately after mixing resin and cure; no induction time is required. Do not mix more material than can be used within the working time: See pot life data. Material which has begun to set cannot be satisfactorily used and must be discarded. Surface temperatures must be at least 5ºF (3ºC) above dew point to prevent condensation.

Application Procedure

MegaSeal WBPC is packaged in the proper proportions which must be mixed together before use. **Mix full units only**.

Pour a substantial portion of mixed material onto floor in a long ribbon approximately 12 to 18 inches wide. Do not scrape or drain containers.

Using either a flat or notched rubber squeegee, spread the mixed material to a uniform thickness. Apply sufficient pressure to work the material into the porous surface.

Wet film thickness can be adjusted by varying the angle of the squeegee to the floor and by varying the amount of pressure applied.

As material is being spread with the squeegee, an applicator wearing spiked shoes should immediately backroll and crossroll the material with a clean, lint-free 3/8" roller. Finish by uniformly tipping off the surface with the roller in one direction, leaving 2 to 4 mils on the surface.

After 15 minutes set up time, the material should be rolled with a spiked roller to aid air release and improve appearance. Do not spike roll after 30 minutes.

If porosity or pinholes are evident after initial cure an additional coat of MegaSeal WBPC may be necessary, especially on very porous concrete.

Clean equipment with water.

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Shipping Data

Packaging unit	5 gal unit
cure	1 gal in 1 ½ gal can
resin	4 gal in 5 gal can

Shipping weight (approx)	lbs	kg
5-gal unit		
resin	40.0	18.1
cure	9.7	4.4

Shelf life when stored indoors at 40° to 100°F (4° to 38°C)
resin and cure 1 year from shipment date.

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities. See application instructions for complete information and safety precautions.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of both components. Safety precautions must be strictly followed during storage, handling, and use.

This product is for industrial use only. Not for residential use.

Warranty

PPG warrants only its title to the products, and that the products will be set forth in the warranty statement, if any, on the products labeling or in the absence of any such warranty statement that the products will conform to PPG's applicable published specifications. PPG's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at PPG's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PPG of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

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