PPG Protective & Marine Coatings

MegaSeal™ SL

Self-leveling epoxy floor coating

Product Data/ Application Instruction

- 100% solids
- Easy to apply, self leveling
- High-gloss
- Smooth, cleanable floor
- Excellent adhesion and abrasion resistance
- Provides long-lasting protection to concrete
- Impact resistant
- Suitable for new concrete or refurbishment

MegaSeal™ SL is a spreadable self-leveling epoxy floor coating for concrete floor protection where a smooth cleanable floor surface is required. MegaSeal SL is an offset for KL8410.

MegaSeal SL may be applied over a broad temperature range at varying thickness. Always mix packaged amounts of resin, and cure. DO NOT vary mix ratio.

MegaSeal™ FLK Flake Additive decorative vinyl chips or MegaSeal™ QTZ Quartz Additive color quartz may be used with MegaSeal SL for an attractive durable finish.

Typical Uses

- Food and beverage processing facilities
- Electronic equipment plants
- Industrial and commercial warehouses
- Laboratory floors
- Pharmaceutical plants
- Power plants
- Waste water and sewage treatment plants

Recommended Systems

Service	Primer	MegaSeal SL	MegaSeal SL Clear
Decorative	MegaSeal HSPC or WBPC	10 mils	10 mils
Mild	MegaSeal HSPC or WBPC	20 mils	Optional
Moderate	MegaSeal HSPC	30 mils	Optional

Products

99-12600	Clear Resin
99-12601	White Resin
99-12603	Tile Red Resin
99-12604	Sandstone Resin
99-12612	Deck Gray Resin
99-12614	Haze Gray Resin
99-12633	Standard Cure
99-12644	Fast Dry Cure

Physical Data

Finish	High gloss	
Components	2	
Curing mechanism	Chemical reaction between components	
Volume Solids (calculated)	100%	
DFT per coat	mils 10 to 30	microns 250 to 750
Coats	1 or 2	
Theoretical coverage	ft^2/gal	m^2/L
10 mils (250 microns)	160	3.9
20 mils (500 microns)	80	1.9
30 mils (750 microns)	53	1.3
Temperature resistance, dry	200˚F (93˚C)	
VOC (EPA 24)	0.3 lb/gal	38 g/L
Flash point (SETA)	°F	°C
cure (99-12633)	230	110
resin	240	116
fast-dry cure (99-12644)	240	116

Performance Data

Flexural Strength	ASTM C580	7,300 psi
Modulus of Elasticity	ASTM C580	474,000 psi
Compressive Strength	ASTM C579	10,500 psi
Linear Coefficient of Thermal Expansion	ASTM C531	60.7 x 10^{-6}
Tensile Strength	ASTM C307	3,290 psi

MegaSeal SL 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 SL. Contact your Sales representative for your specific requirements.

Surface Preparation

Coating performance is proportional to the degree of surface preparation. MegaSeal SL must be applied over MegaSeal HSPC or MegaSeal WBPC primer. Refer to the Product Data/ Application Instructions for the specific primer being used for surface preparation specifications. Concrete and primed concrete surfaces must be clean and dry and free of contaminants such as dust, dirt, grease, or oil. It is important that a suitable moisture barrier is in place for slabs on-grade. If a moisture barrier is not in place, seasonal variations in ground moisture can cause excessive hydrostatic pressure regardless of results measured prior to coating applications.

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 3lbs. or less over a 1000 sq.ft. area during a 24 hour period, measured and confirmed through a calcium chloride test (ASTM F1869). 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 PPG representative for guidance. 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 and primed concrete
Surface Preparation	ASTM D4260 or 4259
Primer	MegaSeal HSPC, MegaSeal WBPC
Method	Pour and spread - squeegee and backroll
Mixing ratio (by volume)	2 parts resin to 1 part cure

Environmental Conditions		
Temperature	°F	°C
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 5˚F (3˚C) above dew point to prevent condensation. Relative humidity must not exceed 85%.

Pot life (mins.)	˚F/˚C		
	90/32	70/21	55/13
standard cure	20	40	60
fast drying cure	NR	25	35

Drying time (hours, @ 20 mils DFT, 50% RH)

	˚F/˚C		
	90/32	70/21	55/13
Standard cure			
Touch	4	6	15
Foot traffic	18	24	48
Heavy traffic	60	72	96
Full cure	5 days	7 days	10 days
Fast-Dry cure	NR		
Touch	—	4	6
Foot traffic	—	16	36
Heavy traffic	—	48	72
Full cure	—	7 days	7 days

Recoat time (hours, @ 20 mils DFT, 50% RH)

	˚F/˚C		
	90/32	70/21	55/13
Standard cure			
Recoat, min	6	8	12
Recoat, max	72	72	72
Fast-Dry cure	NR		
Recoat, min	—	7	8
Recoat, max	—	72	72

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 – ⅜ 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 SL 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 SL 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 potlife data. Material which has begun to set cannot be satisfactorily used and must be discarded. Surface temperatures must be at least 5˚F (3˚C) above dew point to prevent condensation.

Application Procedure

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

Pour mixed material onto floor in a long ribbon approximately 12 to 18 inches wide. Do not drain or scrape the bucket.

Using either a flat or notched rubber squeegee depending upon film thickness requirements, spread the mixed material to a uniform thickness.

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 ⅜" roller. Finish by uniformly tipping off the surface with the roller in one direction.

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.

Shipping Data

Packaging	5 gal unit	
standard cure	1.67 gal in 2½ gal can	
fast dry cure	1.67 gal in 2½ gal can	
resin	3.33 gal in 5 gal can	
Shipping weight	lbs	kg
5 gal unit		
resin	49.0	22.2
cure	17.0	7.7

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 each component. 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.

PPG makes no other warranties concerning the product. No other warranties, whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply.

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Due to PPG's policy of continuous product improvement, the information contained in this Product Data/Application Instructions sheet is subject to change without notice. It is the Buyer's responsibility to check that this issue is current prior to using the product. For the most up-to-date Product Data/Application Instructions always refer to the PPG Protective & Marine Coatings website at www.ppgpmc.com.

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