



MegaSeal™ PS

Penetrating Sealer

Product Data/ Application Instructions

- Solventless sealer
- Accepts broad range of topcoats
- Compatible with damp substrates
- Resists high humidity and moisture
- Primer for concrete surfaces
- Curing compound for new concrete

Typical Uses

MegaSeal™ PS is a penetrating sealer used as a primer/sealer for new or seasoned concrete. It can also be used as a concrete curing compound. When used as a concrete curing compound, MegaSeal PS is applied to concrete slabs immediately after pouring and finishing, or to formed concrete surfaces as soon as the forms are removed (three days after initial pour). Concrete must cure a minimum of 14 days (total) prior to topcoating with epoxy surfacers or coatings

Typical Systems Using MegaSeal PS

First Coat	Second Coat	Third Coat
MegaSeal PS	MegaSeal TF, WBPC or HSPC	MegaSeal SL, HDSL or HPU

Products

99-2500	Clear Resin
99-2533	Cure

Physical Data

Finish	Gloss	
Color	Clear	
Components	2	
Curing mechanism	Chemical reaction	
Volume solids (calculated)	100%	
Dry film thickness per coat	1.5 mils (38 microns)	
Coats	1 or 2	
Theoretical coverage	ft ² /gal	m ² /L
1.5 mils (38 microns)	1069	27.1
VOC (theoretical)	lb/gal	g/L
mixed	0.0	0.0
Temperature resistance, dry	°F	°C
Continuous	200	93
Intermittent	250	121
Flash point (SETA)	°F	°C
MegaSeal PS base	>212	>100
MegaSeal PS hardener	>212	>100

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. All surfaces must be clean, dry and free of all contaminants.

Concrete – All surfaces to be coated must be strong and sound, contain no additives or hardeners, and should not be treated with sealers or conventional curing compounds containing waxes, silicones, or silicates. New slabs (horizontal surfaces) should have a float finish or broom finish as described in ACI Specification 301. Finishing shall be within Class A tolerance, when using MegaSeal PS as a concrete curing compound and applying epoxy surfacing. For existing slabs with a trowelled finish, see Primer section below.

Primer – Water-cured concrete or existing structures must be cured a minimum of 14 days and have attained 80 percent of its final strength. When cured, surface must either be prepared per ASTM D4259 or ASTM D4260 with muriatic acid using equal parts of acid to water by volume.

A suitably finished surface must have a uniform surface texture exposing fine aggregate resembling coarse sandpaper. If required, repeat acid etching or abrasive blasting until the surface texture is uniform.

Concrete surfaces cured with conventional curing compounds or contaminated with form oils must be completely cleaned by ASTM D4259. Acid etching is not acceptable, as it will not normally remove these contaminants.

Curing compound – Formed surfaces should be adequately vibrated to minimize air pockets and holes. Suitable form facing material should be used to produce a smooth form finish as described in ACI Specification 301. When MegaSeal PS is used as a curing compound the forms should be removed within three days and the MegaSeal PS applied immediately. New concrete, which will be cured with MegaSeal PS, does not require blasting or etching. Remove fins and projections from formed concrete, and ensure that all surfaces are free from oil or contaminants. Cure concrete a minimum of 14 days prior to applying epoxy surfacing. When applying epoxy surfacing the MegaSeal PS must be roughened when maximum topcoat time is exceeded.

Apply as soon as possible after pouring and finishing the concrete.

Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

Airless spray – Standard equipment such as Graco Bulldog Hydra-Spray or larger with a 0.13- to 0.021-in. (0.38 to 0.53 mm) fluid tip.

Conventional spray – Industrial equipment such as DeVilbiss MBC or JGA spray gun with 78 or 765 air cap and “E” fluid tip, or Binks No. 18 or 62 gun with a 66 x 63 PB nozzle set up. Separate air and fluid pressure regulators, and a moisture and oil trap in the main air supply line are recommended.

Power mixer – Jiffy Mixer powered by an air or an explosion-proof electric motor.

Brush – Natural bristle. Maintain wet edge.

Roller – Use industrial roller. Level any air bubbles with bristle brush.

Application Data

Finish	Gloss
Applied over	Concrete
Method	Airless or conventional spray, brush or roller

Mixing ratio (by volume) 1 part resin to 1 part cure

Pot life (minutes)	°F/°C		
	90/32	70/21	50/10
	35	60	100

Environmental conditions

Temperature	°F		°C	
air	32 to 120		0 to 49	
surface	32 to 120		0 to 49	

Drying time (ASTM D1640) (hours)

	°F/°C			
	90/32	70/21	50/10	32/0
touch	8	12	18	28
hard	22	28	36	52

Recoat/topcoat time (hours)

	°F/°C			
	90/32	70/21	50/10	32/0
minimum	18	24	30	38
maximum ^{***}	1 month			

^{***}Roughen surface if max recoat/topcoat time exceeded.

Drying times are dependent on air and surface temperatures as well as film thickness, ventilation and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures - not simply ambient air temperatures. Surface temperatures should be monitored, especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window.

Thinner Amercoat 65 or Xylol

Application Procedure

1. Flush equipment with thinner.
 2. Add MegaSeal PS cure to MegaSeal PS resin. Mix thoroughly until uniformly blended.
- | | | | |
|--------------------|-------|-------|-------|
| Pot life (minutes) | °F/°C | | |
| 2 gal unit | 90/32 | 70/21 | 50/10 |
| | 35 | 60 | 100 |
3. Thinning is not normally recommended. If needed for workability add Amercoat 65 or Xylol up to 1/4 pint per gallon of mixed MegaSeal PS.
 4. Apply wet coat in even parallel passes, overlapping each pass by 50%.
 5. MegaSeal PS is low in viscosity. Apply one coat at 1.5 mils or sufficient thickness to completely cover and penetrate concrete. Porous surfaces may require an additional coat of MegaSeal PS.
 6. Clean all equipment with equipment cleaner immediately after use.

On slabs, puddled areas of water must not remain. On formed surfaces no running water may be evident.

Primer – When used over acid-etched concrete apply immediately after water rinsing. Abrasive blasted concrete must be thoroughly cleaned to remove all loose material, then may be moistened with water. A damp surface aids in primer/sealer penetration into the surface.

Brush out any primer/sealer which puddles in low areas on slabs (horizontals) or runs or sags on formed surfaces (verticals) during application.

After overnight curing, coated surface may vary in appearance. Areas which appear to have no evidence of primer/sealer indicate a high porosity. In these areas, a second application is recommended. Surfaces not properly primed or sealed may result in bubbling of surfacer. Avoid thick glossy areas of MegaSeal PS. Roughen these areas prior to topcoating.

Curing compound – When used as a curing compound, MegaSeal PS must be applied to slabs (horizontals) immediately after the final finishing operation or upon disappearance of the “sheen” of surface moisture. On formed surfaces (verticals), apply immediately after form removal. (Forms should be removed within three days after concrete is poured.) If there is any drying or appreciable loss of moisture, spray the surface with water and allow to reach a uniform damp condition with no excess water on the surface.

Immediately after use, clean all application equipment.

Shipping Data

Packaging unit	2-gal	
MegaSeal PS resin	1 gal in 3-gal can	
MegaSeal PS cure	1 gal in 1-gal can	
Shipping weight (approx)	lb	kg
2-gal unit		
MegaSeal PS resin	13.5	6.1
MegaSeal PS cure	11.0	5.0

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, colors and testing variances. Allow for application losses and surface irregularities.

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.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

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

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