



MegaSeal™ HDSL

Heavy Duty Self-Leveling Epoxy Floor Coating

Product Data/ Application Instructions

- Zero VOC, solventless
- Easy to apply
- Wide range of uses
- Smooth, cleanable floor
- Excellent adhesion
- Provides long-lasting protection to concrete
- Can be used indoors or outdoors
- Good durability and appearance
- Topcoatable
- Suitable for new concrete or refurbishment

MegaSeal™ HDSL is a spreadable self-leveling epoxy surfacer for concrete floor protection where a smooth cleanable floor surface is required.

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

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™ HDSL	Final Coat
Decorative	MegaSeal HSPC	40 mils	MegaSeal™ HPU
Mild	MegaSeal HSPC	40-60	
Moderate	MegaSeal HSPC	60-100	
Severe	MegaSeal HSPC	100-175	

Note: An optional final coat of MegaSeal™ TF or MegaSeal HPU may be used for mild service.

Products

99-12001	Ivory Resin
99-12010	Gray Resin
99-12033	Cure
99-12055	Powder component

Physical Data

Color*	Ivory, gray	
<i>*MegaSeal HDSL is subject to color change upon aging. There may be minor variations in color from batch to batch.</i>		
Components	3 – resin, cure and powder	
Curing mechanism	Chemical reaction between components	
DFT per coat	mils	microns
	40 to 175	1000 to 4375
Coats	1 or 2**	
Theoretical coverage (ft ² /unit)		
Thickness (mils)		
40	88	
60	58	
80	44	
100	35	
120 (=1/8 in)	29	
130	27	
160	22	
175	20	
VOC	0.0 lb/gal	0.0 g/L
Flash point (SETA)	°F	°C
cure	240	116
resin	230	110

Typical Properties after 11 days @ 70°F (21°C)

Mechanical

Tensile strength (ASTM C307)	2,110 psi
Compressive strength (ASTM C579)	8,250 psi
Flexural strength (ASTM C580)	3,930 psi
Modulus of elasticity (ASTM C580)	8.03 psi x 10 ⁵

Surface Preparation

Coating performance is proportional to the degree of surface preparation. Refer to specifications for specific primer being used. MegaSeal HDSL is applied over MegaSeal HSPC primer. The primed concrete surface must be clean and dry and free of contaminants such as dust, dirt, grease, or oil.

Concrete – Acid etch (ASTM D4260) or abrasive blast (ASTM D4259). Apply MegaSeal HDSL within maximum recoat time after priming. Over very rough abrasive-blasted concrete, a skim coat of MegaSeal HDSL may assist in achieving a smooth surface. When a second coat is used for smoothing, for adjusting thickness or for repair, apply within maximum recoat time. If recoat time is exceeded, roughen the surface before reapplication. If this is the case, and a skim coat/full coat of MegaSeal HDSL will be applied, then the use of MegaSeal HSPC as a primer coat is optional.

Application Data

Applied over	Prepared and primed concrete*	
Surface Preparation	ASTM D4260 or 4259	
Primer	MegaSeal HSPC	
Method	Pour and spread - roll or gauge rake	
Mixing ratio	As packaged. Mix full units only.	
Environmental conditions		
Temperature	°F	°C
air	40 to 100	14 to 38
surface**	40 to 120	4 to 49
material	50 to 90	10 to 32

*A primer is optional for two-coat application of MegaSeal HDSL. Over very rough abrasive-blasted concrete a skim coat of MegaSeal HDSL may assist in achieving a smooth surface.

** Surface temperature must be least 5°F (3°C) above dew point to prevent condensation. Relative humidity must not exceed 85%.

	°F/°C		
Working time (hours)	90/32	70/21	50/10
Normal	1/2	3/4	1 1/2
Drying time (hours)	°F/°C		
ASTM D1640	90/32	70/21	50/10
touch	2	3	16
through (walk-on)	6	16	28
Time before service	1 day	2 days	4 days
Minimum topcoat time (hours) with MegaSeal TF, MegaSeal HPU	90/32	70/21	50/10
	6	16	28
Maximum recoat time (days)**			
MegaSeal HDSL over MegaSeal HDSL	2	3	5
MegaSeal HDSL over MegaSeal HSPC	7	14	28
MegaSeal HPU over MegaSeal HDSL	3	5	10
MegaSeal TF over MegaSeal HDSL	15	30	45

**Roughen surface if maximum recoat time is exceeded.

Application Equipment

The following equipment is recommended, but other equipment may be used:

Roller – Short nap, phenolic core.

Gauge rake – Such as, Silikal gauge rake in 24 or 32 inch lengths.

Plastic spiked roller – Such as, Silikal porcupine roller.

Environmental Conditions

Temperature	°F	°C
air	40 to 100	4 to 38
surface	40 to 120	4 to 49
material	50 to 90	10 to 32

Mixing

MegaSeal HDSL is a 3 component package. 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.** Then add powder. Stir until uniformly blended by keeping mixing blade down at the bottom of container to reduce air entrainment. MegaSeal HDSL is ready for use immediately after mixing resin, cure and powder. No induction time is required. Do not mix more material than can be used within the working time: 45 minutes at 70°F (21°C). 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 HDSL is packaged in the proper proportions which must be mixed together before use. **Mix full units only.**

Pour and Spread

Roller – MegaSeal HDSL can be applied using a short nap roller.

1. Pour mixed material on the floor and spread with a short nap roller.
2. Eliminate bubbles by rolling applied material with a spiked plastic roller.
3. Clean equipment with epoxy or equipment thinner.

Gauge rake – MegaSeal HDSL can be applied using a gauge rake.

1. Pour mixed material, then spread evenly over concrete flooring using the gauge rake.
2. Eliminate bubbles by rolling material with a spiked plastic roller.
3. Clean equipment with epoxy or equipment thinner.

Repair – Reapply MegaSeal HDSL over clean MegaSeal HDSL surface up to 3 days @ 70°F (21°C). Roughen surface after 3 days.

Shipping Data

Packaging	lbs	kg
cure	3.6 lb in 1-gal can	
resin	7.9 lb in 5-gal can	
powder	21.4 lb in EnviroPac™	
Shipping weight (approx)	lbs	kg
cure	4.4	2
resin	11.4	5.2
powder unit	22.7	10.3

Shelf life when stored indoors at 40 to 100°F (4 to 38°C) in unopened, tightly sealed containers, resin, cure and powder is 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.

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

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