

PANSEAL Concrete Primer — DX-1100 Series

Models: DX-1100, 1100CTR • Generic type: Epoxy primer

Effective Date: December 2024

1. PRODUCT DESCRIPTION

DX-1100 is a 100% solids, low-viscosity sealant designed as a primer for concrete surfaces. Its slow cure rate and hybrid chemistry allow DX-1100 to deeply penetrate surfaces, which greatly enhances the long-term performance of coatings and sealants. DX-1100 is recommended for concrete because it blocks outgassing and eliminates the formation of bubbles.

DX-1100 can be applied to green concrete as soon as seven days, based on ASTM F1869-10, with a moisture vapor emission of 10 lb or less per 1,000 sq ft in a 24-hour cycle. It can be applied by brush, roller or sprayer.

2. FEATURES & BENEFITS

- Thin viscosity, deep-penetrating sealant
- Eliminates outgassing
- Increases adhesion strength to concrete
- Easy brush, roller or spray application
- Adheres to damp concrete
- 100% solids and entirely free of solvents and VOCs

3. PHYSICAL PROPERTIES

Generic type	Epoxy primer
Color	Clear amber
Finish	Gloss
Primer	Self-priming; may be applied over most types of coatings
Topcoats	Acrylics, epoxies, polyurethanes
Dry film thickness	3 – 5 mils per coat
Recommended thickness	3 – 5 mils (2 coats recommended on concrete with high porosity)
Solids content by volume	100%
Theoretical coverage	Concrete: 320 – 530 sq ft/gal at 3 – 5 wet mils per coat
Temperature resistance	Continuous: 176 °F (80 °C) Non-continuous: 203 °F (90 °C)
Elongation at 3 mils	15%
Flash point	> 250 °F (121 °C)
Pull-off adhesion (ASTM D4541)	Minimum adhesion 2,750 psi
Mixing ratio	1.6A : 1B by volume
Container sizes	1 gallon kit, 5 gallon kit, 55 gallon drum
Weight per gallon	9.41 lb

4. SUBSTRATES & SURFACE PREPARATION

Substrate	Preparation
General	Surfaces must be clean and dry. Remove all dirt, dust, oil and other contaminants. Pressure wash prior to coating to rinse off cleaners and degreasers.
Steel	Remove all oil, grease or scale, then blast with coarse angular silica or mineral aggregate to obtain a 3 mil (75 micron) minimum profile, achieving NACE 1 / SSPC SP-5 (white metal blast) or NACE 2 / SSPC SP-10 (near-white metal blast), or their equivalents.
Concrete / CMU	Concrete must be cured a minimum of 7 days at 75 °F (24 °C) and 50% relative humidity or equivalent. Prepare in accordance with ASTM D4258 (Surface Cleaning of Concrete) and ASTM D4259 (Abrading Concrete). Voids in

Substrate	Preparation
	concrete may require surfacing. Mortar joints should be cured a minimum of 15 days.

5. MIXING & THINNING

Mixing

Power mix Part A resin separately, then add Part B hardener and power mix.

Thinning

Sprayer	Up to 6.5 oz/gal (5%) with acetone or xylene
Brush	Up to 16 oz/gal (12%) with acetone or xylene
Roller	Up to 16 oz/gal (12%) with acetone or xylene

* Use of thinners other than those supplied or recommended by Dynesic may adversely affect product performance and void the product warranty, whether expressed or implied.

Pot life

Temperature	Pot life
77 °F (25 °C)	4 hours
92 °F (33 °C)	1 hour 30 minutes

* Do not keep the blended coating in the original container unless immediate use is planned — exothermic heat created during curing will considerably shorten the pot life. Pour the coating into a rolling tray or directly onto the surface, keeping the depth in the tray below 3/8 in.

6. APPLICATION GUIDELINES

The following are general equipment guidelines. Job site conditions may require modifications to achieve the desired results. DX-1100 is a 100% solids coating and may require adjustments in spray technique; wet film thickness is easily and quickly achieved. The spray equipment below has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Airless spray — single leg or hot pot

Power pump size	30:1 or greater
Hose length / diameter	200 ft × 3/8 in. ID
Whip length / diameter	10 ft × 1/4 in. ID
Work life — 4 gallons at 90 °F (32 °C)	No thinner: 60 minutes 3 – 5% thinner: 80 minutes

* Part A resin and Part B hardener should be heated individually to 75 – 85 °F (24 – 29 °C) before mixing so the product atomizes properly. Mixed product should be sprayed within 20 minutes of mixing.

Brush and roller

Brush	Use a medium bristle brush.
Roller	Use a short-nap synthetic roller cover with a phenolic core.

Be aware of working life when using brush or roller application.

7. CURE SCHEDULE & RE-COAT WINDOW

Temperature	Minimum re-coat	Maximum re-coat
60 °F (15 °C)	24 hours	14 days
77 °F (25 °C)	12 hours	14 days
100 °F (37 °C)	4 hours	48 hours

8. PERFORMANCE DATA

Test method	System	Result
ASTM D4541 — Adhesion, dry	Blasted steel, 1 coat	> 2,500 psi
ASTM D4541 — Pull-off adhesion	Dry concrete	> 500 psi (concrete failure)

9. PACKAGING, HANDLING & STORAGE

Shelf life	Part A: 24 months at 75 °F (24 °C) · Part B: 24 months at 75 °F (24 °C), in original unopened containers under recommended storage conditions
Shipping weight — 1 gallon kit	10 lb (4.54 kg)
Storage temperature	40 – 110 °F (4 – 43 °C)
Storage humidity	0 – 100% relative humidity
Storage	Store indoors. Not affected by excursions below the published storage temperatures, down to 10 °F, for no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogeneous when properly mixed.

10. CLEANUP & SAFETY

Cleanup	Use MEK or acetone. In case of spillage, absorb and dispose of in accordance with applicable local regulations.
Safety	Read and follow the hazard information, precautions and first aid directions on the individual product labels and Safety Data Sheets before using.
Ventilation	When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. Test and monitor exposure levels to ensure all personnel are below guidelines.

11. ABOUT DYNESIC TECHNOLOGIES

Dynesic produces exceptional, chemically engineered coatings, adhesives and sealants offering premium corrosion protection. Dynesic products are known for industrial, high-strength performance on commercial projects while being easy and safe for DIY purposes. Dynesic Technologies can be found protecting steel, ductile and concrete substrates worldwide.

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