

Deep Penetrating Primer & Sealant



SELECTION & SPECIFIC DATA

Generic Type

Epoxy Primer

Description

DX-1100 is a 100% solids, low viscosity sealant designed as a primer for concrete surfaces. It's slow cure rate and hybrid, novolac chemistry allow DX-1100 to deeply penetrate surfaces, which greatly enhances the long term performance of coatings and sealants. DX-1100 is especially recommended for concrete applications because of it's ability to eliminate outgassing and bubbles. DX-1100 can be applied to green concrete as young as seven days based on ASTM F1869-10 with a moisture vapor emission of 10 lbs. or less per 1,000 square foot area in a 24 hour cycle. DX-1100 is ideal for preventing hydrostatic pressure as well as increasing the adhesion to concrete with a deep penetration strength of 800 psi or greater. DX-1100 can be applied with a brush, roller or sprayer.

Product Features & Benefits

- *Low viscosity, deep penetrating sealant*
- *Eliminates outgassing caused by traditional primers*
- *Increases adhesion to concrete due to deep penetration 800 psi or greater based on ASTM D4541*
- *Easy brush/roller/spray application*
- *Adheres to damp concrete*
- *100% solids and entirely free of solvents and VOCs*

Color/Part #	Clear Amber/DX-1100
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
Solids Content	By Volume 100%
Theoretical Coverage Rate	Concrete: 320 - 530 ft ² /gal at 3 - 5 wet mils per coat
Dry Time	Continuous: 176°F (80°C) Non-Continuous: 203°F (90°C)
Container Size	1 gallon kit, 5 gallon kit, 55 gallon drum
Elongation @ 3 mils	15%
Flash Point	> 250°F (121°C)
Pull-Off Adhesion Test	ASTM D 4541 - Minimum adhesion is 2750 psi
Recommended Thickness	3-5 mils (2 coats recommended on concrete with high porosity)
Weight per gallon	9.41 lbs.

SUBSTRATES & SURFACE PREPARATION

General Surfaces must be clean and dry. Remove all dirt, dust, oil and all other contaminants.

DX-1100

- Steel** Remove all oil, grease, or scale from the surface, and then blast with coarse angular silica or mineral aggregate to obtain a 3 mil (75 micron) minimum profile and to achieve the following surface preparation standards or their equivalents:
 NACE 1/SSPC SP-5 - White Metal Blast
 NACE 2/SSPC SP-10 - Near-White Metal Blast
- Concrete or CMU** Concrete must be cured a minimum of 7 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing. Mortar joints should be cured a minimum of 15 days.

MIXING & THINNING

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

Thinning **Spray:** Up to 6.5 oz/gal (5%) w/ Acetone or Xylene

Brush: Up to 16 oz/gal (12%) w/ Acetone or Xylene

Roller: Up to 16 oz/gal (12%) w/ Acetone or Xylene

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

Ratio 1.6A:1B by volume

Pot Life 4 hours at 25°C (77°F)

1 hour 30 minutes at 33°C (92°F)

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

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General)

This is a 100% solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment 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 x 3/8 in ID

Whip Length/Diameter: 10 ft x 1/4 in ID

Work Life: 4 gal at 32°C (90°F)

No Thinner: 60 minutes

3 - 5% Thinner: 80 minutes

* *Part A resin and Part B hardener should be heated individually to 75°F - 85°F (24°C - 29°C) before mixing so product will atomize properly in delivering paint to the substrate. Mixed product should be sprayed within 20 minutes after mixing.*

Brush & Roller (General)

This material may be applied with brush or roller. Be aware of working life when using brush or roller application.

Brush Use a medium bristle brush.

Roller Use a short-nap synthetic roller cover with phenolic core.

CLEANUP & SAFETY

Cleanup Use MEK or Acetone. In case of spillage, absorb and dispose of in accordance with local, applicable regulations.

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Safety

Mixes and applications of this product present a number of hazards. 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. User should test and monitor exposure levels to insure all personnel are below guidelines.

PACKAGING, HANDLING & STORAGE

Shelf Life

Part A: 24 months at 75°F (24°C)
Part B: 24 months at 75°F (24°C)

* When kept at recommended storage conditions and in original unopened containers.

Shipping Weight (Approximate)

1 Gallon Kit: 10 lbs. (4.55 kg)

Storage Temperature & Humidity

40° – 110°F (4° – 43°C)
0 – 100% Relative Humidity

Storage

Store Indoors. This product is not affected by excursions below these published storage temperatures, down to 10°F, for a duration of no more than 14 days. Always inspect the product prior to use to make sure it is smooth and homogeneous when properly mixed.

PERFORMANCE DATA

TEST METHOD

ASTM D-4541 Dry
Pull-off Adhesion ASTM D4541 Dry

SYSTEM

Blasted Steel 1 ct.
Concrete

RESULTS

>2,500 psi
>500 psi concrete failure

CURE SCHEDULE & RE-COAT WINDOW

TEMPERATURE	MINIMUM RE-COAT	MAXIMUM RE-COAT
15°C (60°F)	24 hours	14 days
25°C (77°F)	12 hours	14 days
37°C (100°F)	4 hours	48 hours

DYNESIC TECHNOLOGIES

Dynesic produces exceptional chemically engineered coatings, adhesives and sealants offering premium corrosion protection, while being safe for the environment and safe/easy to apply. Dynesic Technologies can be found protecting steel, ductile and concrete substrates worldwide.



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