

SELECTION & SPECIFICATION DATA

Generic Type

Epoxy – polyamide. Part A and Part B mixed prior to application

General Properties

Penetrating clear primer-sealer for concrete surfaces prior to application of surfacers or polyurethane membranes. US Primer meets ASTM C-309 Type 1 specification for moisture retention of concrete (check local Air Pollution Regulations before use). Excellent fast-drying material. Priming and sealing action provides excellent adhesion for surfacers and polyurethane membranes.

RECOMMENDED USES

As a curing compound or form release agent. For application on “green” concrete walls to retard the escape of moisture during cure period. Excellent for use as a form coating on plywood or steel forms. Application prior to surfacing assures tight adhesion between concrete and surfacers or membranes. Compatibility with other coatings, surfacers and polyurethane membranes eliminates need for form release oils or curing oils.

Not Recommended for

Immersion in strong acids or solvents or in corrosive areas without recommended topcoat

CHEMICAL RESISTANCE GUIDE (with suitable topcoat)

Exposure	Splash & Spillage
Acids	Good
Alkalies	Good
Solvents-Aliphatic	Good
Salt	Very Good
Water	Very Good
Solvent-Aromatic and Koetone	Good
Oil & Grease	Excellent

Temperature Resistance (non-immersion)

Continuous :	93°C
Non – continuous:	104°C
May yellow at temperatures above:	66°C

Flexibility : Very Good

Weathering : Good (Chalks)

Abrasion Resistance: Excellent

Substrates Apply over suitably primed metal, concrete, or other surface as recommended

Topcoat Required May be topcoated with catalyzed epoxies, phenolics, polyurethane membranes or other as recommended. Consult US Crete Technical Service for specific recommendations.

Compatibility With Other Coatings Can be applied over most epoxies. For specific recommendations, contact US Crete Technical Service

SPECIFICATION DATA

Theoretical Solids Content Of Mixed Material

	By Volume
US Primer	28% ± 2%

RECOMMENDED DRY FILM THICKNESS PER COAT

2 mils (50µ)

THEORETICAL COVERAGE PER MIXED GALLON*

11.2 sq.m/ℓ at 25µ

5.6 sq.m/ℓ at 50µ

*NOTE: Material losses during mixing and application will vary and must taken into consideration when estimating job requirements.

Shelf Life	24 months minimum when stored at 24°C
Colors	Clear only
Gloss	High; will chalk if exposed to sunlight.

PACKING 18 litre/set

FLASH POINT (Pensky-Martens Closed Cup)

US Primer Part A	1°C
US Primer Part B	9°C
US Thinner #15	23°C

APPLICATION INSTRUCTION

Surface Preparations Remove any oil grease from surface to be coated with clean rags soaked in Thinner #2 in accordance with SSPC-SP 1-82

Concrete Curing Compound - Walls Only: Apply immediately after forms have been stripped. Floors must have cured concrete. US Primer cannot be used as a curing membrane for concrete floors. Form Release Compound: Use clean, dry, untreated Grade 1 plywood. Apply at least two coats, thin first coat 50%. Refresher coats may be applied as needed. US Primer is not a substitute for blasting or acid etching for immersion service





US PRIMER

NOTE: While US Primer may be applied to green concrete walls, generally additional coats or other coatings should not be applied until the concrete has cured 28 days at 24°C and 50% R.H. or equivalent.

Primed surface - Remove fins and other protrusions by stoning, sanding or grinding. Remove form oils, incompatible curing agents and hardeners by abrasive blasting. For large holes or pits, use an epoxy surfacer for leveling and uniformity prior to application of US Primer.

Immersion Service: Abrasive blast to open all voids and obtain a surface similar to medium grit sandpaper (horizontal surfaces may be acid etched). Blow or vacuum off sand and dust

Non-immersion: Horizontal surfaces must be acid etched or abrasive blasted to remove laitance. For other surfaces, blow off with compressed air to remove dust.

MIXING : power mix separately, then combine and mix in the following proportions:

Mfr. & Gun	2 Gal. Kit	10 Gal. Kit
US Primer Part A	1 gallon	5 gallons
US Primer Part B	1 gallon	5 gallons

For spray or brush application, may be thinned up to 25% by volume with Thinner #15. When coating wood, the first coat should be thinned 50% by volume with Thinner #15. Allow a 1 hour "sweat-in" prior to application.

Pot life : 24 hours at 24°C and less at higher temperatures. Pot life ends when coating become too viscous to use.

APPLICATION TEMPERATURES

	Material	Surfaces
Normal	10 - 29°C	10-29°C
Minimum	4°C	4°C
Maximum	32°C	54°C

	Ambient	Humidity
Normal	10-32°C	30-85%
Minimum	4°C	0%
Maximum	49°C	90%

Do not apply when the surface temperature is less than 3°C above the dew point. Special thinning and application techniques may be required above or below normal conditions.

SPRAY Use sufficient air volume for correct operation of equipment. Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.

Note : The following equipment has been found suitable, however, equivalent equipment may be substituted.

Brush Or Roller

Use a natural bristle brush or short nap roller with phenolic core. Lambswool applicator may also be used

Drying Times Before Topcoating

Temperature	Between Coats	Final Cure
4°C	24 Hours	48 Hours
10°C	12 Hours	42 Hours
16°C	6 Hours	35 Hours
24°C	2 Hours	24 Hours
32°C	2 Hours	18 Hours

Clean Up : Use US Thinner #2

STORAGE CONDITIONS (Store Indoors)

Temperature : 7 - 43°C*

Humidity : 0-100%

*Return to minimum application temperature before use.

CAUTION: Contains combustible solvents. Keep away from sparks and open flames. In confined areas workmen must wear fresh airline respirators. Hypersensitive persons should wear gloves or use protective cream. All electric equipment and installations should be made and grounded in accordance with the national electrical code. In areas where explosion hazards exist, workmen should be required to use nonferrous tools and to wear conductive and nonsparking shoes.

