



U.S. POLYMER SURFACES
INTERNATIONAL
www.uspolymersurfaces.com
info@uspolymersurfaces.com

POLYSURF CRETE U SL (Slurry)

Product Data Sheet

Technical Data
(Cure Time at 70°F (24°C), 50% R.H.)

POLYSURF CRETE U SL (Slurry) Self-Leveling Urethane Slurry

Product Description:

PolySurf CRETE U SL is a 3-part, 100% solids, aromatic self-leveling, cementitious urethane slurry system typically applied at 1/8" (3.17mm) to 3/8" (9.52mm) thickness. It has a textured matte finish and can be used to form containment beams, integral cove bases for seamless wall-to-floor protection or to slope floors in horizontal applications.

PolySurf CRETE U SL is custom formulated to provide a strong barrier against hydrostatic pressure and thermal shock while delivering a quick turnaround cure time. It is extremely receptive to decorative aggregate broadcast and acts as an aggressive barrier against chemicals, abrasive wear and heavy impact.

PolySurf CRETE U SL has proven its protective strength in cold rooms, freezers and commercial kitchens. It is especially well suited for tough, harsh environments that require a trowel solution applied below 40°F. PolySurf CRETE U SL is the recommended cost-effective solution for flooring contractors interested in avoiding operational downtime.

Features:

- No Blistering, No Chipping
- Can Be Applied Below 40°F
- Quick Return-To-Service (4-6 hrs.)
- Excellent Thermal Shock and Impact Resistance
- Superior Protection Against Hydrostatic Pressure
- Meets California VOC and SCAQMD Requirements

Typical Floor Uses:

- Cold Rooms/Freezers
- Pharmaceutical
- Manufacturing
- Warehouse/Storage
- Commercial Kitchens
- Food & Beverage
- Metal Processing
- Electronic Assembly

Colors:

Red, Grey, Tan

Packaging:

Available in pre-packaged kits. Colorant is furnished separately.

Each kit consists of:

- Part A – Urethane Liquid
- Part B – Hardening Catalyst
- Part C – 42 lb. Bag of Dry Aggregate

Coverage Rates:

Apply PolySurf CRETE U SL slurry using a 1/2" notched squeegee.

Dry film thickness coverage will average:

- 55-60 sq. ft. @ 1/8" (3.17mm)
- 25-30 sq. ft. @ 1/4" (6.35mm)
- 16-20 sq. ft. @ 3/8" (9.52mm)

Color	Red, Grey, Tan
Hardness, ASTM D-2240	70 ± 5 Shore D
Compressive Strength, ASTM C-579	9000 psi
Tensile Strength, ASTM D-412	2500 psi
Flexural Strength, ASTM D-580	3700 psi
Flexural Strength, ASTM D-790	5100 psi
Adhesion, ASTM D-4541	>400
Impact Resistance, ASTM D-2794	pass
UV Resistance, F-52505	no chalking or loss of adhesion
Water Absorption &, ASTM C413	<0.1%
Flammability, ASTM D-648	<1.07 watts/cm 3
Flame Spread, ADTM E-84	Class A
Abrasion, ASTM D-4060	20-30 mgs lost
Coefficient of Friction, ASTM D-2047	0.9
Thermal Shock, Mil F-52505	no chalking or loss of adhesion
Density, ASTM C-905	15 lbs/gal

Chemical Resistance (Based on ASTM D-814)

POLYSURF CRETE U SL was unaffected by the following chemicals:

Acidic Chemicals
Acetic Acid, 1%
Acetic Acid, 10%
Hydrochloric Acid, 1%
Hydrochloric Acid, 10%
Sulfuric Acid, 1%
Sulfuric Acid, 10%
Basic Chemicals
Ammonium Hydroxide, 1%
Ammonium Hydroxide, 10%
Oils, Fuels and Other Chemicals
Hydraulic Oil
Motor Oil
Unleaded Gas (Regular)
Unleaded Gas (Premium)
Hexane
IPA
MIBK
Xylene

Storage:

All containers should be stored between 45°F to 85°F and be kept tightly sealed and out of direct sunlight.

Surface Preparation:

PolySurf CRETE U SL slurry can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc.

Concrete surfaces must be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile equal to CSP 4-6. After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections.

Limitations:

PolySurf CRETE U SL should not be applied in temperatures below 40°F, above 85°F, or when relative humidity is >85%. Apply only to dry, properly prepared, uncoated, reinforced concrete floor slabs that have a moisture content of <10%. Do not apply if air temperature is within 5° F of dew point.

Product Instructions

For complete information associated with the application of PolySurf CRETE U SL, refer to the general guidelines section of the U.S. Polymer Surfaces catalog that describes the surface preparation, job conditions, finishing details and other necessary information.

Aggregate Mix

Add pre-packaged PolySurf CRETE U SL kit Parts A & B together and blend using a "mud mixer" for 30 seconds. Then add the pre-packaged aggregate Part C and mix for 60 to 120 seconds or until the color is uniform. Temperature will affect mixing.

PolySurf CRETE U SL Application

Immediately pour the blended USP CRETE U SL mixture onto the floor and begin application. Using a 1/2" notched squeegee, USP CRETE U SL is typically applied between 1/8" (3.17mm) and 3/8" (9.52mm) dry film thickness.

Warning: The products in this system contain Isocyanate and solvent.

Limited Warranty:

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local U.S. Polymer Surfaces International representative or visit our website for current technical data and instructions.

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