

US CRETE 200 SL

SELF – LEVELING FLOORING EPOXY



DESCRIPTION

Two component epoxy-amine.

General Properties : An advanced, self-leveling epoxy polymer that produces a smooth high gloss floor protection system with optimal housekeeping features. It provides excellent adhesion to properly prepared surfaces and offers cost-effective means for protecting floors from moderate truck traffic and chemical spills.

- Provides a Very Smooth, Aesthetic Surface
- Easily Cleaned
- Long Wearing - Exhibits Excellent Abrasion Resistance
- Very Low Solvent Content
- Very Low Odor

RECOMMENDED USES

US Crete 200 SL is typically used to enhance, beautify and protect floors. It is recommended where trowel-done floor toppings are not needed but conventional coatings are inadequate in appearance and durability:

US Crete 200 SL is used to smooth horizontal surfaces where decontamination, appearance, chemical and abrasion resistances are of prime consideration.

Certain capabilities are enhanced through the use of select US Crete fillers. Consult Carboline Technical Service for specific recommendations.

Not Recommended for: applications in direct sunlight (may discolor), areas of heavy fork-lift traffic, as a thick film surfacing compound (accessory products are used for this). Not recommended for immersion service or where hydrostatic pressure may be a factor.

TYPICAL CHEMICAL RESISTANCE GUIDE

Exposure	Splash & Spillage	Fumes
Acids	Very Good	Excellent
Alkalies	Excellent	Excellent
Solvents	Very Good	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent

Dry Temp. Resistance : (Non-immersion)

Continuous: 200°F (93°C)

Non-Continuous: 250°F (121°C)

Substrates :

Apply over properly prepared and primed concrete as recommend. Can be applied over properly prepared catalyzed epoxies or phenolics. A primer or a surfacer is required depending on concrete condition. Consult US crete Technical Service for specific recommendations.

Compatibility with Other Coatings :

May be used over most catalyzed epoxies and phenolics. Before applying US Crete 200 SL over existing, aged coatings, a test patch is recommended to verify compatibility and adhesion of the system. May be topcoated with the recommended other coatings to enhance appearance and wear resistance.

Theoretical Solids Content of Mixed Material :

US Crete 200 SL By Volume: 96% ± 2

Volatile Organic Content : (The following are nominal values)

As supplied : 45 g/l

Recommended Dry Film Thickness Per Coat :

30~80 mils (750~2000µm) for general use. For applications above 100 mils(2500µm) total thickness, consult US Crete.

Mixing and application will vary and must be taken into consideration when estimating job requirements.

Theoretical Covegace Per Mixed Gallon:

3.85 sq. ft. at 40 mils (0.96 sq. m/l at 1000µm)

Storage Conditions : Store Indoors

Temperature : 40~110°F (4~43°C)

Humidity : 0~90%

Bring products to a temperature between 60°F (15°C) and 90°F (32°C) prior to application.

Shelf Life : 12 months minimum stored at 75°F (24°C).

Colors : Available in White, Gray, Red(0516), Green, Blue and Tan. Consult your local US Crete Sales Representative or US Crete Customer Service Representative for availability. For USDA applications, request lead and chromate free colors.

Gloss : High gloss (unfilled), Satin finish (utilizing Filler #42).

Flash Point : (Pensky-Martens Closed Cup)

US Crete 200 SL Part A 198°F (92°C)

US Crete 200 SL Part B 200°F (93°C)

Thinner #15 81°F (27°C)

Technical Data

PROPERTIES	RESULTS
Tensile Strength (Binder Alone)	53 Mpa
Elongation at break	4.0%
Compressive Strength	65 Mpa
Impact Resistance	27.1 J/M
Flexural strength	32 Mpa
Abrasion Resistance	0.072 g
Water absorption	0.22%
Burning rate	6.14 cm/min
Thermal shock resistance	NO EFFECT
Freezing & Thawing resistance (cracking)	PASS



SURFACE PREPARATIONS

Chemical cleaning of concrete may be necessary prior to blast cleaning, roto peening, or high pressure water blasting to remove surface contaminants such as oil, grease and dirt. Solvents should not be used for this purpose. If contamination is extensive, steam cleaning may be necessary. Normal Concrete must be clean and dry before coating.

Smooth surfaces must be abrasive blasted or acid etched to open voids, remove laitance and obtain a surface similar to medium grit sandpaper prior to topcoating. Acid etched concrete must be properly neutralized, rinsed and dried. Vacuum to remove dust. Vacuum blasting is the preferred method of surface preparation.

Do not use on previously coated concrete or concrete treated with hardening solutions unless a test patch indicate satisfactory adhesion. Do not apply unless concrete has cured at least 28 days at 70°F (21°C) and 50% relative humidity or equivalent cure.

PRIMING

A Primer/sealer is necessary to minimize bubbling of US Crete 200 SL. The product or products used for this purpose depends on the condition of the substrate after surface preparation. For specific product and application information, complete a US Crete Floor Audit Checklist and submit to US Crete Technical Service.

MIXING

Slowly power mix the Part A, then add Part B. Keep the mixing blades at slow speed and down in the product to minimize whipping air into the material. Mix to blend thoroughly. Do not mix partial kits. Material is highly reactive. Mix no more than will be used within potlife. See potlife section for cautions.

Mixing Ratio (by volume) = 12.85 : 3.15 (Part A to Part B)

When used, the Special Fillers #41 and #42 must be added to the Part A component prior to mixing the Part A and Part B components together. Special Fillers are optional.

Thinning :

Thinning is not normally required but may be thinned up to 5% with Thinner #15 or Thinner #25. Consult US Crete Technical Service for specific thinning recommendations.

Use of thinners other than those supplied or approved by US Crete may adversely affect product performance and will void product warranty, whether express or implied.

Pot Life :

25 minutes at 75°F (24°C) and less at higher temperatures. Immediately use material to obtain longest working time.

Caution:

This product is exothermic at the end of its pot life. Any unused quantities will become extremely hot and will generate smoke and fumes. The material begins to thicken at the end of its pot life which is an indication of exothermic. Immediately spread out on appropriate surface or add sand or other suitable heat sink to the unused material to reduce the severity of the exothermic. Take appropriate precautions against breathing fumes. See the material safety data sheet for this product.

APPLICATION CONDITIONS

Condition	Material	Surfaces	Ambient	Humidity
Normal	70~85°F (21~26°C)	70~80°F (21~26°C)	70~90°F (21~32°C)	0~80%
Minimum	60°F (15°C)	60°F (15°C)	60°F (15°C)	0%
Maximum	90°F (32°C)	100°F (37°C)	100°F (37°C)	85%

Do not apply when surface temperature is less than 5°F (or 3°C) above the dew point.

Special application techniques may be required above or below normal conditions.

Spray:

The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Conventional :

Bottom Feed Pressure Pot equipped with dual regulators, 1/4" I.D. minimum material hose, 1/2" I.D. fluid tip and appropriate air cap.

Airless :

- Pump Ratio : 30 : 1 (min.)
- GPM Output : 3.0 (min.)
- Material Hose : 1/2" I.D.(min.)
- Tip Size : 0.025 ~ 0.030"
- Output PSI : 2100 ~ 2300
- Filter Size : N/A

Teflon packings are recommended and are available from pump manufacturer.

Non-Skid Applications :

When a skid resistant surface is required, use Filler #3 with US Crete 200 SL. When used, first apply a 10-14 mil wet film of US Crete 200 SL. Then, broadcast the Filler #3 evenly on the surface of the wet film. After broadcasting the Filler #3, use a mohair roller in order to wet the particles.

Brush or Roller :

Use medium bristle brush or good napless phenolic roller. Avoid excessive rebrushing and rerolling.

Other Tools :

Notched squeegees, screed bars, spike rollers, spike shoes.

Drying Times :

- These times are at 30 mils (760µm dry film thickness).
- Between coats : 16 hours at 75°F (24°C)
- Light Foot Traffic : 24 hours at 75°F (24°C)
- Final Cure : 7 days at 75°F (24°C)

Clean Up : Use US Crete Thinner #2. or Thinner #15

Caution :

Read and follow all caution statements on This product data sheet and on the material safety Data sheets for this product.

