CITADEL

ULTRA-HYDRO STOP PRIMER

DESCRIPTION AND USES

Citadel® Ultra-Hydro Stop Primer is a versatile moisture vapor barrier ideal for use on damp and green concrete floors. It is the perfect solution on moisture laden concrete surfaces for the installation of most resinous coatings and protects moisture sensitive flooring. Ultra-Hydro Stop Primer is two component, 100% solids epoxy primer that is easy to install, self-leveling and fast setting. It provides excellent adhesion and is capable of holding back up to 25 lbs. of moisture vapor transmission (MVT). Available in Clear, Dunes Tan and Light Grey. The pre-tinted colors can be used as broadcast coats to save time and money.

PRODUCT FEATURES AND BENEFITS

- Compliant with all state and federal VOC regulations
- Typical one coat application
- Excellent adhesion to moisture laden slabs
- Resistant to high PH
- Meets ASTM F3010 standard requirements

PRODUCTS

SKU	DESCRIPTION
10301B	Clear 5 Gallon Kit
359081	Dunes Tan 5 Gallon Kit
359082	Light Gray 5 Gallon Kit

RECOMMENDED TOPCOATS

Contact your Citadel Representative or Rust-Oleum Technical Service Department for approved systems and more detailed information.

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

CONCRETE REPAIR

All spalls and cracks must be chased out and repaired to ICRI standards using Citadel Concrete Repair Compound. For floors with very high moisture levels, cracks should be repaired with a mix of Ultra-Hydro Stop Primer and Cab-O-Sil® fumed silica to create a paste and applied by trowel or putty knife.

SURFACE PREPARATION

New concrete must be allowed to cure for a minimum of 14 days before application of the Ultra-Hydro Stop Primer. All concrete surfaces must be free of all dirt, grease, oil, fats, and other contamination. Remove surface contamination by cleaning with Rust-Oleum® Professional Cleaner Degreaser, detergent, or other suitable cleaner.

PRODUCT APPLICATION (cont.)

SURFACE PREPARATION (cont.)

After the concrete surface has been cleaned and visibly dry at the time of application, the concrete must be further prepared. The concrete surface texture must be comparable to ICRI CSP Level 3 for moderate environments or Level 5 for severe environments. Contact your Citadel Representative or Rust-Oleum Technical Service Department for more detailed information.

MIXING

Both components and environment should be preconditioned to a minimum of 60ºF (15ºC) prior to use. Hand mixing is not adequate. You must combine the base and activator by power mixing using either a 3" Jiffler Mixer or Hanson Plunge Mixer. Mix at 500-750 rpm for 1-3 minutes. Do not over mix or use higher speeds. This can introduce air into the coating causing small bubbles in the finish.

Start mixing the Base component in the short filled 5-gallon pail then add in the two gallons of Activator while maintaining mixing. It is very important to transfer as much activator as possible. Mix the two components together for 1-3 minutes being careful to not pull air into the mixture. Do not mix more material than what can be applied within 25 minutes of mixing.

If mixing less than the premeasured amounts, mix each component separately before accurately measuring out material. Use a 3:2 (base to activator) by volume mixing ratio and mix thoroughly.

TINTING (Clear)

Pre-mix Universal Tint Packs prior to adding into floor coatings. Add Universal Tint Packs at 8 oz. per gallon of mixed floor coating material and combine thoroughly via power mix to achieve uniform colorant dispersal.

NOTE: Some colors, including safety colors, may require additional coats if desired coverage is not achieved in the first application.

NOT FOR USE IN WATER BASED COATINGS

EQUIPMENT RECOMMENDATIONS

SQUEEGEE: Use a high-quality notched rubber squeegee.

ROLLER: Use a high quality 3/8" lint-free roller with a phenolic core.

BRUSH: Use a disposable natural fiber chip brush, 2-4" wide for cut in work.

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PRODUCT APPLICATION (cont.)

APPLICATION

Apply only when air, material and floor temperatures are between 60-80°F (15-27°C) and surface temperature is at least 5°F (3°C) above the dew point. Do not apply in direct sunlight or when temperature is rising. Immediately after mixing, pour the material onto the floor in a long, 8-12-inch-wide stripe.

Ultra-Hydro Stop Primer is to be applied at a minimum thickness of 16 mils. Ultra-Hydro Stop Primer when applied at a minimum of 16 mils thickness, without tinting or broadcasting into it, will reduce vapor emission rate up to 25 lbs./1,000 sq. ft./24 hour and maximum RH of 99%. To ensure proper coverage, periodically check mil thickness using a wet film thickness gauge. Ultra-Hydro Stop Primer that is tinted or broadcast into (i.e., chips, quartz, silica, etc.) will not have the same moisture blocking properties. Contact your Citadel Representative or Rust-Oleum Technical Service Department for more information.

NOTE: Do not try to work out of a pan or container, as the build-up of heat could shorten the pot life and create a hazardous condition. Do not scrape the sides or bottom of the container. Use only the material that flows naturally out of the container. Also, do not turn the container upside down and leave on the floor to drain. Doing so may result with unactivated material from the sidewall of the container being applied. This will cause soft spots in the coating.

Use a rubber squeegee to spread the material out and achieve the 80-100 sq. ft./gal. spread rate. Back roll the material smooth using a 3/8" lint free roller with a phenolic core to smooth out the finish. If needed, a spiked roller can be used to release any entrapped air in the coating.

Ultra-Hydro Stop Primer should be allowed to flow down into saw cuts, but not allowed to fill the saw cut. Allow to cure for a minimum of 24 hours before the placement of backer rod and a suitable polyurethane sealant. All expansion joints must be honored.

COVERAGE

One activated gallon of Ultra-Hydro Stop Primer will cover 80-100 square feet. The full 5-gallon kit will cover 400-500 square feet. This spread rate must be honored to ensure the primer properly performs.

THINNING

Not required.

CLEANUP

Acetone.

PERFORMANCE CHARACTERISTICS

COMPRESSIVE STRENGTH

METHOD: ASTM D695
TYPICAL VALUE: 15,225 psi

TENSILE STRENGTH

METHOD: ASTM D638
TYPICAL VALUE: 10,000 psi

FILM HARDNESS, SHORE D

METHOD: ASTM D2240
TYPICAL VALUE: 85

FLEXURAL STRENGTH

METHOD: ASTM D790 @ 2 hours
TYPICAL VALUE: 16,100 psi

PERMEANCE

METHOD: ASTM E96
TYPICAL VALUE: 0.09 perms (grains/h/sq. ft./in. Hg)

EPOXY	TECHNICAL DATA	CDL-13

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PHYSICAL PROPERTIES

		ULTRA-HYDRO STOP PRIMER
Resin Type		Amidoamine Converted Epoxy
Weight*	**Per Gallon**	9.1 lbs.
	Per Liter	1.1 kg/l
Solids by Volume		100%
Volatile Organic Compounds		0 g/l
Mixing Ratio		3:2 (Base to Activator by volume)
Induction Time		None required
Working Time		25 minutes at 77°F (25°C)
Recommended Dry Film Thickness (DFT) Per Coat		16 mils
Practical Coverage		100 sq. ft./gal. Coverage rate can vary depending on the texture and porosity of the concrete
Recoat/Topcoat		12-14 hours. Scuff sanding is required if greater than 24 hours
Shelf Life		5 years
CAUTION		Protect from freezing
Safety Information		For additional information see SDS

Calculated values are shown and may vary slightly from the actual manufactured material.
*Activated material