CITADEL® PG-100

DESCRIPTION AND USES

PG-100 is a two-component, 100% solids, VOC Free, Aliphatic Polyaspartic Polyurea that was developed as a chemical resistant UV stable topcoat for broadcast floors. This odor free coating provides reliable performance in a wide range of temperatures and climate conditions. 100% UV stability makes it an excellent choice for both interior and exterior applications.

PRODUCTS

DESCRIPTION	SKU
Part A 5 Gallon	10509
Part B Fast 5 Gallon	10511B
Part B Slow 5 Gallon	10512
Part B Fast 0-50° 5-Gallon Kit	10504

RECOMMENDED PRIMERS

- Ultra Hydro Stop*
- Ultra Hydro Stop H2O*
- EP-55
- Polycuramine
- SLE-100
- Polyurea 350

*If there is a moisture issue with the floor, then it must be primed with one of the Ultra Hydro Stop Primers.

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

SURFACE PREPARATION

The concrete surface must be free of all dirt, grease, oil, fats, and other contamination. Remove surface contamination by cleaning with Krud Kutter® Cleaner Degreaser, detergent, or other suitable cleaner. Rinse thoroughly with clean, fresh water and allowed to dry.

NEW, UNCOATED CONCRETE: New concrete must be allowed to cure for a minimum of 30 days before application. In addition to the aforementioned cleaning, the concrete must be further prepared by mechanical grinding or acid etch to remove all laitance and produce a suitable surface profile.

PREVIOUSLY COATED CONCRETE: Previously coated concrete must be in good sound condition with the existing coating tightly adhering to the concrete. In addition to the aforementioned cleaning the existing coating must be sanded to dull the finish and produce a slight surface profile. Remove all sanding dust by vacuum.

PRODUCT APPLICATION (cont.)

MIXING

Both components should be pre conditioned to a minimum of 50º F (10ºC) prior to use. Thoroughly mix each component separately before combining.

If only using part of a container, be sure to use a separate mixer blade for each component to avoid cross contamination. Pour the Part A and Part B components together in a clean, dry five gallon container or larger and power mix for a minimum of two minutes. Do not entrain air into the mixing. Do not mix more material than can be applied in 20-25 minutes.

If using less than a full container, combine the components using a mixing ratio of 1:1.5 by volume, Part A (Base) to Part B (Activator).

TINTING

If tinting, add 12% by volume of the selected color Polyurea Universal Tint (1 quart of tint per 2 gallons of activated material). Power mix until a uniform color is achieved.

EQUIPMENT RECOMMENDATIONS

ROLLER: Use a high quality ⅜ inch lint-free roller with a phenolic core.
BRUSH: Use a disposable natural fiber chip brush, 2-4 inch wide for cut in work.

APPLICATION

Apply only when air, material and floor temperatures are between 30-90°F (-1-32°C) and surface temperature is at least 5°F (3°C) above the dew point. The relative humidity of the air should not be greater than 85%. Do not apply in direct sunlight or when temperature is rising. Colder environmental conditions can slow the cure of PG-100. Be sure the substrate is completely dry. Variability in these conditions during application may lead to surface defects. For application outside of this temperature range, please contact Rust-Oleum Technical Service.

Immediately after mixing, pour the material onto the floor in a long, 8 to 12 inch wide stripe.

NOTE: 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.

Form: ARJ-2101
Rev.: 121720

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PRODUCT APPLICATION (cont.)

APPLICATION (cont.)

Use a rubber squeegee to spread the material out and achieve the 100-300 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.

NOTE: Coverage rate can vary depending on the texture and porosity of the concrete.

THINNING: Not normally required.

CLEAN-UP: Acetone.

PERFORMANCE CHARACTERISTICS

TENSILE STRENGTH

METHOD: ASTM D412
RESULT: 6,000 psi

COMPRESSIVE STRENGTH

METHOD: ASTM C695
RESULT: 9,700 psi

ELONGATION

METHOD: ASTM D412
RESULT: 100

FILM HARDNESS, SHORE D

METHOD: ASTM D2240
RESULT: 75

GLOSS

METHOD: ASTM D523 @ 60°
RESULT: 91+

TABER ABRASION

METHOD: ASTM 4060, CS 17, 1,000 g load, 500 Cycles
RESULT: 30 mg.

CHEMICAL RESISTANCE

CHEMICAL	RESULT (77°F/25°C)
Acetic Acid 100%	C
Acetone	C
Ammonium Hydroxide 50%	RC
Benzene	C
Brine saturated H2O	R
Chlorinated H2O	R
Clorox H2O	R
Diesel fuel	RC
Gasoline	RC
Gasoline/5% MTBE	RC
Gasoline/5% Methanol	RC
Hydrochloric Acid 20%	R
Hydrofluoric Acid 10%	NR
Hydraulic fluid (oil)	RC
Isopropyl Alcohol	R
Lactic Acid	RC
MEK	RC
Methanol	R
Methylene Chloride	C
Mineral Spirits	RC
Motor Oil	R
MTBE	C
Muriatic Acid 10%	R
NaCl/H2O 10%	R
Nitric Acid 20%	NR
Phosphoric Acid 10%	R
Phosphoric Acid 50%	NR
Potassium Hydroxide 10%	R
Potassium Hydroxide 20%	R, Dis
Propylene Carbonate	RC
Skydrol	C
Sodium Hydroxide 25%	R
Sodium Hydroxide 50%	R, Dis
Sodium Hypchlorite 10%	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar/H20	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1, 1,1-Trichlorethane	C
Trisodium Phosphate	R
Vinegar/H2O 5%	R
H2O	RC
H@O 174 days @ 82°C	RC
Xylene	RC

Chemical Resistance: Chart Key

R=recommended/little or no visible damage
RC=recommended conditional/some effect, swelling or discoloration
C=Conditional/Cracking-wash within one hour of spillage to avoid affects
NR=Not recommended
Dis=discolorative

CITADEL® PG-100

PHYSICAL PROPERTIES

		PG-100
Resin Type		Polyaspartic Polyurea
Weight	**Per Gallon**	10.0 lbs.
	Per Liter	1.2 kg/l
Solids by Volume		100%
Volatile Organic Compounds		<50 g/l**
Mixing Ratio		1:1.5 (Part A to Part B)
Induction Time		None required
Pot Life		20-25 minutes
Practical Coverage		100-300 sq.ft./gal. Coverage rate can vary depending on the texture and porosity of the concrete
Dry Times @ 72ºF and 50% Relative Humidity†	**Tack Free**	1-2 hours
	Dry Hard	3-6 hours and 24 hours for vehicle traffic
	Recoat	2-12 hours*
Shelf Life		12 months
Safety Information		See SDS

Calculated values are shown and may vary slightly from the actual manufactured material.
† Extreme cold temperatures may slow cure times.
* If 12 hour recoat time has elapsed, the coating must be properly abraded and cleaned prior to recoating.
** Calculated Applied VOC