



CITADEL® ET-80

DESCRIPTION AND USES

ET-80 is a new and improved version of our popular two-component, 80% solids, VOC Compliant, Aliphatic Polyaspartic. ET-80 has extended pot life, which allows the installer the opportunity to keep more product in the bucket, mix larger quantities of product, and still have the fast cure time characteristics of Polyaspartics.

PRODUCT FEATURES AND BENEFITS

- Displays fast cure times with excellent adhesion characteristics to a variety of substrates/coatings
- Will provide a glossy smooth finish when cured
- Extended open times offer better workability while maintaining a fast cure rate
- 100% Polyurea elastomer displays excellent UV, chemical, and abrasion resistance at a wide range of temperatures
- Can be applied indoors or outdoors with minimal disturbance contributed to high VOC levels that are found in most epoxies and polyurethanes
- Versatile topcoat for use on both horizontal and vertical applications
- Easy to mix 1:1 ratio
- Working time of 30-35 minutes once mixed

PRODUCTS

DESCRIPTION (Clear)	SKU
A Side 5 Gallon	10433B
B Side Slow 5 Gallon	10434
Slow 4 Gallon Kit	10435A

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

NEW CONCRETE: Laitance must be removed by diamond grinding or shot blasting. On concrete that has been cured with curing compounds or has had a hard steel troweled finish, shot blasting, sandblasting or other methods of mechanical preparation will be required. New concrete should be cured for a minimum period of 28 days at 70°F prior to application.

EXISTING CONCRETE: Concrete must be clean and sound. Old coatings and toppings must be removed. Concrete must be clean and free of previous coatings, oil, wax, paint, and other contaminants. The surface of the concrete must be clean and properly profiled to enable the coating to achieve maximum bond. Water soluble contaminants can be hosed off with water. Some water insoluble materials are difficult to remove and may require sandblasting, scabbling, or other methods of removal.

For either new or existing concrete, when preparation is complete, the surface texture should be similar to 60-80 grit sandpaper. Concrete must be visibly dry at time of application.

PRODUCT APPLICATION (cont.)

MIXING EQUIPMENT

Low speed drill and spiral mixing wand. Must pre-mix prior to use.

Important: Hand mixing will produce inconsistent results and is not an approved method.

MIXING

Note: Before starting, ensure that the material, concrete surface, and the ambient air are all at 30-90°F. Mixing ratio is 1 part A to 1 part B.

Pre-mix both A and B sides prior to combining.

Add part "A" to the mixing container.

Add part "B" to the mixing container and mix for 60-90 seconds.

DO NOT THIN

TINTING

If tinting, add 12% by volume of the selected color Polyurea Universal Tint. Power mix until a uniform color is achieved. Carefully monitor amount of colorant added to each gallon to ensure color is uniform. On large projects, make sure all colorant is from the same lot # or intermix all colorants. Tint is to be added in the field at the time of application.

APPLICATION EQUIPMENT

- 24" flat blade squeegee
- 18"-3/8" lint free roller

APPLICATION

Mix only what you can squeegee and back roll within 30-40 minutes (approximately 1 gallon of mixed material per crew of two applicators wearing spiked shoes). Do not aerate the mix.

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 ET-80. 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. Wearing spiked shoes, immediately pour mixed ET-80 on the floor in ribbons. Spread using a squeegee and then back roll using a short nap lint-free roller.

CLEAN UP

Clean Tools and application equipment immediately after use with active solvent like xylene(in SCAQMD use acetone only). Clean spills or drips while still wet with solvent. Dried product will require mechanical abrasion for removal.



CITADEL® ET-80

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(10%) 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/H2O	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1, 1,1-Trichlorethane	C
Trisodium Phosphate	R
Vinegar/H2O 5%	R
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

PERFORMANCE CHARACTERISTICS

COMPRESSIVE STRENGTH

METHOD: ASTM C695
 RESULT: 7950 psi

TENSILE STRENGTH

METHOD: ASTM D412
 RESULT: 4500-5200 psi

BOND STRENGTH TO CONCRETE

METHOD: ASTM D4541
 RESULT: Exceeds tensile strength of concrete (concrete fails first)

TABER ABRASION

METHOD: ASTM 4060, CS 17
 RESULT: Loss/1000 cycles = 28 mg.

FLAMMABILITY

METHOD: ASTM D635
 RESULT: 1.2 cm./min.

COEFFICIENT OF FRICTION

METHOD: ASTM D2047
 RESULT: 0.77 unglazed

FILM HARDNESS, SHORE D

METHOD: ASTM D2240
 RESULT: 137

ELONGATION

METHOD: ASTM D412
 RESULT: 100



CITADEL® ET-80

PHYSICAL PROPERTIES

		ET-80
Resin Type		Polyaspartic Polyurea
Pigment Type		Varies depending on color
Solvents		Benzyl Alcohol
Weight	Per Gallon	9.59 lbs.
	Per Liter	1.1 kg
Solids	By Weight	80%
	By Volume	80%
Volatile Organic Compounds*		<10 g/l
Recommended Dry Film Thickness (DFT) Per Coat		6-12 mils
Recommended Wet Film Thickness (WFT) Per Coat		7.5-15 mils
Practical Coverage (assume 15% material loss)		100-200 sq.ft./gal. Coverage rates will vary based on application method.
Mixing Ratio		1:1
Pot Life @ 70-80°F (21-27°C) and 50% Relative Humidity		35-40 minutes
Re-Coat Window (Min./Max)		2 hours/12 hours
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Foot Traffic	2-4 hours
	Vehicle Traffic	24 hours
	Full Cure**	7 days
Shelf Life		2 year
Flash Point		>200°F (93°C)
WARNING!	CAUSES NOSE, THROAT, EYE AND SKIN IRRITATION. CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED. MAY CAUSE ASTHMA, SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. SEE THE PRODUCT SAFETY DATA SHEET (SDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.	
Safety Information		For additional information, see SDS

* Activated material

**Coating achieves its full physical and chemical resistant properties.

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

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