

# POLYUREA-80C

Product Information Category: Sealer Product Series 2400 1-gal kit 1:1 A to B Available in Gloss New Formulation Replacing Polyurea 90C July, 2019

# **Description and Use:**

Polyurea-80C is a two component, ultra-high solids, Polyurea Polyaspartic. New advanced chemistry provides for a 4-hour dry time with a 40-minute pot life. The result produces a versatile high gloss finish coat over a variety of surfaces including plain concrete, stained concrete, overlays, and epoxy floors.

It has excellent UV resistance, mar resistance and chemical resistance. It is excellent for industrial, commercial and industrial floors including garage floors, restaurant floors, food processing facilities, and automotive service centers of moderate to high traffic use. It meets all low VOC requirements throughout the USA. (< 5 g/l)

Polyurea-80C is ideally suited for the following Granicrete Systems:

XAlternative Overlay FlooringConcreteXInteriorXEpoxy FlooringXExteriorXShower FXXCountertopXOutdoor IslandsXReal MetallixXShower Stands

Colors:

Clear high gloss

# Coverage:

Kit is 1/2-gallon Part A resin to 1/2-gallon Part B hardener Approximately 300 sf/gal kit as a primer acetone-diluted sealer over concrete and overlays. 200-250 sf/gal kit over smooth surfaces (previously sealed or epoxied).

# Limitations:

- Do not apply unless ambient temperature is 5° above the dew point
- Do not apply if rain is expected within 24 hours.
- Do not apply on damp or moist surface as it will whiten and may cause delamination.
- Do not apply over wood or previously painted surfaces.
- Do not allow to freeze.
- Always apply on a test area before starting actual job. Prior to coating previously sealed surfaces, do a small area to test for adhesion.
- Shelf life is 12 months from the batch date.
- Allow light foot traffic after 24 hours and vehicle traffic after 72 hours.

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# **Moisture Vapor Emissions/Alkalinity Precautions:**

All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission and related high levels of alkalinity that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine if excessive levels of vapor emissions or alkalinity are present before applying any coatings. Granicrete is not responsible for coating failures due to undetected moisture vapor emissions or related high levels of alkalinity.

# Surface Preparation:

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete.

Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes sprinklers, rain, fog, dew, etc.

Epoxy or sealed surface: Apply directly over new epoxy or urethane within 24 hours of initial application. When applying over existing epoxy or urethane that has been cured for longer than 24 hours, sand the surface with 100 grit sandpaper, remove debris and wipe with acetone just before new application.

#### Mixing Instructions:

The material is supplied in pre-measured kits for easy proportioning. Premix Part A and Part B before mixing together. Mix together a low-medium jiffy mixer for about three minutes. Scrape the sides while mixing to assure proper mix. No thinning is recommended.

# **Application:**

For best results, the material should be spread by squeegee or magic trowel and finished with a mohair roller cover. Neatly cut-in all edges with a brush and spread thin and evenly throughout surface to be coated.

After spreading evenly, lightly back roll using a 1/4" solvent proof, non-shedding nap roller for smooth surfaces and a 3/8" nap for rough surfaces. Be sure to roll gently and evenly in a "V" pattern, rolling in both directions. Avoid over rolling as this may cause unwanted bubbles or roller marks. Avoid puddling, as material will turn white and bubble. Brush all puddles and expansion joints to avoid this problem. You have approximately 20 minutes to work with, as product will begin to "tack-up" as it begins to cure. Application of the material must be done immediately after mixing.

For large jobs, be sure to have enough mechanics to keep a wet edge. Application rate should be kept above 100 sq. ft. per gallon (below 15 mils). Thicker films may entrap solvent or cause CO2 bubbles. If allowed to puddle, CO2 bubbles will appear as frosted areas.

Re-coat if needed *within*24 hours of application to insure adhesion. If a delay occurs, it is recommended that the surface be sanded and wiped clean with acetone before reapplication.

# Handling Precautions:

Use only with adequate ventilation/or a cartridge type respirator designed to be used for isocyanates. Avoid contact with skin, wear protective gloves. **Read Safety Data Sheet before using.** 

# Slip and Fall Precautions:

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slip resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Granicrete's SRA is a quality recycled product to use as a slip resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Granicrete is not be responsible for injury incurred in a slip and fall accident.

#### **Technical Data:**

Dry Film Thickness per Coat: ASTM D-3363 Tear Resistance ASTM D-1004-66 Tensile Strength ASTM D-412 Ultimate Elongation ASTM D-412 Gloss (60 deg) ASTM D-823 Volume Solids ASTM D-2697 VOC ASTM D 2369-81 Pot Life (75°F) Recoat Time Taber Abrasion ASTM D-4060-84

Impact Resistance ASTM D-2794-84 Inch-pounds Pencil Hardness ASTM D-3363-84 Pendulum Hardness After 1 Day After 7 Days Viscosity at 75 F(24 C) 50% RH V A-SIDE B-SIDE 4-7 mils
270 pli
3980 psi
8-10%
90
80% by volume
< 5 g/l</li>
40 minutes
5 hrs (min) -24 hrs (max)
33.9 mg Loss, *C17 Wheel, 1000g Load, 1000 Cycles*Direct 120 Reverse 90
2-H
43 Seconds
168 Seconds

200-300 cps

350-400 cps

	At 4 hours	At 24 hours
50% Sulfuric Acid	Slight Soften	Blister
10% Sulfuric Acid	No Effect	No Effect
10% Hydrochloric Acid	No Effect	No Effect
50% Ammonium Hydroxide	No Effect	No Effect
50% Sodium Hydroxide	No Effect	No Effect
IPA - Iso-Propyl Alcohol	No Effect	No Effect
MEK - Methyl Ethyl Ketone	No Effect	No Effect
Deionized (Water)	No Effect	No Effect
10% Betadine	No Effect	No Effect
Break Fluid	No Effect	No Effect
Gasoline	No Effect	No Effect

This product is for use by Granicrete Independent applicators only Wear Personal Protective Equipment Read SDS before using this product DOT/Flash Point – Flammable Liquid Classification, regulated

**Manufacturer/Distributor Warranty**: As neither the manufacturer nor the distributor has control over the actual installation of this product, the manufacturer and distributor disclaim any and all warranties expressed or implied regarding color shade, appearance, and product performance at and after opening product containers. Manufacturer and distributor recommendations and suggestions are made without guarantee. Conditions of installer's and consumer's use of this product are beyond the control of manufacturer and distributor. Manufacturer and distributor disclaim any liability incurred in connection with the use of this product or information contained herein.

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