

PRODUCT DESCRIPTION

APF Polyurea 5100 is a two-component, high-solids, aliphatic Polyurea/Polyaspartic hybrid that provides the desirable properties of polyester-polyurethane materials with a shorter cure time and reduced film thickness limitations. Available in both regular cure and fast cure versions.

APF Polyurea 5100 is a low viscosity, easy to apply product that results in a very high gloss finish that is both hard and abrasion-resistant. This material is easy to clean and has excellent resistance to a broad range of chemicals. Unlike conventional polyurea materials, APF Polyurea 5100 has adequate working time to be applied by brush and roller. APF Polyurea 5100 is a very rapid curing product able to be returned to full service in 24 hours. APF Polyurea 5100 is UV stable to ensure long-term gloss retention and resistance to yellowing. Developed as a high-performance coating for various protective and seamless flooring applications, APF Polyurea 5100 is ideally suited for use as a finish coat in decorative flake and color quartz flooring systems and various types of decorative architectural concrete applications. This product should be applied when the surface and ambient temperatures are between 50°F-85°F (10°C-30°C).

USES

- Decorative quartz and flake flooring systems
- Clean rooms, hospital & healthcare
- Restaurants-grocery-food service
- Automotive
- Aviation
- Pharmaceutical

ADVANTAGES

- Excellent resistance to elevated temperatures (<175°F/80°C)
- Will cure down to 40°F (4.5°C)

COLORS

Available in Clear and White, Slate, Delta Fog, and Sterling

PACKAGING

Supplied in complete A+B 1.0 gallon (3.78 L) and 10 gallon (37.8 L) kits. Mix ratio 1A : 1B.

COVERAGE

Coverage Rate: 250-300 sqft/gallon (5-6 mils WFT)

TECHNICAL DATA

Mixing Ratio by Volume	1A : 1B	
VOC	<50 g/l	
Solids Content, by Volume	90%	
Hardness, Pendulum	172	
Gloss (60°)	95	
Bond Strength to Concrete (ASTM D-4541)	>350 psi, concrete fails	
Cure Time (77°F)	Regular Cure	Fast Cure
Pot Life/Working Time	~ 20-30 Minutes	~ 15-20 Minutes
Dry to Touch	~3Hour	~2Hour
Recoat	<24 Hours	<24 Hours
Light Traffic	~12 Hours	~8 Hours
Vehicle Traffic	~5 Days	~3 Days
Full Cure	~7 Days	~7 Days

Higher temperature and lower humidity will shorten cure time.

Lower temperatures and higher humidity will increase cure time.

If 24 hour recoat window exceeded, substrate recoat preparation required.

CONCRETE MOISTURE

It is the applicators responsibility to test for concrete moisture in accordance with ASTM F2170-19. If moisture is indicated to be in excess of 85%, apply APF VaporSolve® system in accordance with the published system data sheet. Consult APF Technical Service for further information.

SURFACE PREPARATION

Concrete must be cured for at least 30 days be clean, structurally sound, and free of wax, loose coatings or curing compounds. Concrete should be properly prepared to achieve a surface Minimum Texture of ICRI/CSP 2-3. Refer to ICRI technical guidelines 310-330 Selecting and specifying concrete surface preparation for sealer, coatings, polymer overlays, and concrete repair. Vacuum the prepared concrete surface to remove all dust. Acid etching is not recommended and will void manufacturers' warranty.

MIXING

Clear: Combine components and mix for 2-3 minutes using slow speed drill, scraping the bottom and sides of the mixing container. It is important to NOT whip air into the material while mixing. Material cannot be properly mixed by hand. Apply material immediately after complete mixing.

Pre-pigmented: Thoroughly pre-mix part A before adding to part B. Combine components and mix for 2-3 minutes using slow speed drill, scraping the bottom and sides of the mixing container. It is important to NOT whip air into the material while mixing. Material cannot be properly mixed by hand. Apply material immediately after complete mixing.

APPLICATION

Apply material onto surface immediately after mixing with a brush or roller, back roll with using a quality solvent resistant 3/8-inch nap roller cover, at a rate of 250-300 sq. ft./gallon (5-6 mils WFT).. DO NOT allow puddling or accumulation in joint areas. A "wet edge" is recommended when applying product, do not attempt to roll over material that has begun to set. An applicator wearing spiked shoes will back roll the wet material using a quality solvent resistant 3/8-inch nap roller cover to distribute the material uniformly. **The material must be thoroughly rolled twice to achieve optimal substrate wetting {using North-South, East-West Method.}**

Apply a second coat, if necessary, within 24 hour recoat window. If the recoat window is exceeded, the surface must be abraded with 100 grit to a uniform gloss free and dust free texture prior to recoat. Product applied at excessive thicknesses will result in surface defects.

LIMITATIONS

- **Use only on primed substrates. Do not apply directly to concrete.** (Contact Technical Service for alternative products if direct to concrete application is desired.)
- Not suitable for constant temperature exposure over 175°F (80°C)
- Before applying, measure and ensure that the ambient temperature is at least 5°F above the dew point.
- Do not exceed 10 mils wet film thickness. Surface defects will occur.
- Work life is considerably shortened over 90°F.
- Do not apply material if the humidity is over 80% and/or poor ventilation/limited air changes. Improper cure will result.
- Use of kerosene or propane forced air heating equipment during application may cause discoloration and finish defects.

SHELF LIFE

Part A: 12 months at 50-85°F { 10-30°C }

Part B: 12 months at 50-85°F { 10-30°C }

*When kept at recommended storage conditions and in original unopened containers. DO NOT ALLOW TO FREEZE. Frozen material is unusable and must be properly disposed of.

HANDLING, SAFETY & STORAGE

- Avoid contact with skin; wear protective gloves. Application personnel must read and fully understand product Safety Data Sheet before using. APF Safety Data Sheets are available at www.apfepoxy.com.
- Store away from heat sources. Store between 50°F and 85°F (10°C-30°C). DO NOT FREEZE. Frozen material is unusable and must be properly disposed of.

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STANDARD WARRANTY STATEMENT

ICP Construction, Inc. ("we" "us" or "our"), manufacturer of Arizona Polymer Flooring, warrants that the product is produced within specifications and is free from defects in material only. No warranty shall be in effect until our Terms and Conditions of Sales (<https://www.icpgroup.com/wp-content/uploads/ICP-Group-Terms-and-Conditions-of-Sale.pdf>) are met, including payment and cooperative promotional considerations. We warrant that the covered product is free of defects in material only and suitable for the specified purpose for a period of one (1) year from the date of shipment, provided the product is (a) installed within its published shelf life, in strict conformance with specifications, and (b) handled, stored, mixed, and applied in accordance with our written instructions. It is your responsibility to initiate any claim against this warranty within the time frame specified below. If we determine that the product meets the requirements of this warranty, then we will, at our sole discretion, either refund the purchase price of the product or provide replacement product, in each case not to exceed the affected area as determined by our authorized technical representative. To obtain replacement or refund you must (a) provide timely written notice to us specifying in detail the non-conformity suspected (no later than five (5) working days after discovery), and (b) provide proof of purchase. We reserve the right to inspect the product prior to replacement. EXCEPT FOR THE EXPRESS WARRANTY ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. IN NO EVENT SHALL WE OR OUR AFFILIATES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY NATURE, REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW, INCLUDING, WITHOUT LIMITATION, BREACH OF ANY OBLIGATION OR WARRANTY IMPOSED ON US HEREUNDER OR IN CONNECTION HERewith, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES IN ADVANCE AND EVEN IF A REMEDY SET FORTH HEREIN IS FOUND TO HAVE FAILED OF ITS ESSENTIAL PURPOSE. "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, WITHOUT LIMITATION, LOSS OF USE, INCOME, OR PROFIT, OR LOSSES SUSTAINED AS THE RESULT OF INJURY TO ANY PERSON, OR LOSS OF OR DAMAGE TO ANY PROPERTY (INCLUDING, WITHOUT LIMITATION, PROPERTY HANDLED OR PROCESSED THROUGH THE USE OF THE PRODUCTS), DAMAGES OR LOSSES RESULTING FROM CLAIMS OF OTHER PERSONS AGAINST YOU, OR DAMAGES OR LOSSES SUSTAINED AS THE RESULT OF WORK STOPPAGE, OR REMOVAL AND REPLACEMENT COSTS AND COSTS OF LABOR. IN NO EVENT SHALL OUR LIABILITY ARISING IN CONNECTION WITH OR UNDER THIS WARRANTY (REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW) EXCEED THE AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT ONLY. THIS LIMITED WARRANTY PROVIDES YOUR EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT. If you do not agree with these terms, you may return the product within thirty (30) days of purchase for a full refund, provided the product is not opened, altered, or adulterated in any manner, less any shipping and handling charges of any sort. Use of the product, or retention of the product beyond thirty (30) days, constitutes your acceptance of this limited and exclusive warranty. No customer, distributor, or representative of ours is authorized to change or modify the published data sheets or this warranty in any way. No one is authorized to make oral warranties on behalf of us.

