

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 releases soil easily 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 color chip and color quartz flooring systems and various types of decorative architectural concrete applications.

USES

- Decorative Quartz and Vinyl Flake Mosaic
- Clean Rooms, Hospital & Healthcare
- Restaurants-Grocery-Food Service
- Automotive
- Aviation
- Pharmaceutical

ADVANTAGES

- Excellent resistance to inorganic acids, 98% sulfuric acid
- Excellent resistance to elevated temperatures (<175°F/80°C)
- Will cure down to 40°F (4.5°C)

CHEMICAL RESISTANCE

Refer to APF Chemical Resistance Chart

COLORS

Available in 10 Standard colors.

TECHNICAL DATA

Mixing Ratio by Volume	1A : 1B	
VOC	1.3 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
Dry to Touch	~3Hour	~2Hour
Light Traffic	~12 Hours	~8 Hours
Vehicle Traffic	~5 Days	~3 Days
Full Cure/Full Chemical Resistance	~7 Days	~7 Days

Cure times are dependent on temperature and humidity

PACKAGING

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

SURFACE PREPARATION

Concrete must be cured for at least 30 days, have a minimum compressive strength of 3000 psi, be clean, structurally sound, and free of wax, loose paint or curing compounds. Concrete should be properly prepared to achieve a surface minimum texture of ICRI/CSP 3 - 4. Refer to ICRI Technical Guidelines 310-330 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. Acid etching is not recommended and will void Manufacturer's warranty. Carefully follow the guidelines listed in the APF published application instructions available at www.apfepoxy.com. Vacuum the prepared concrete surface to remove all dust. Previously coated surfaces that are soundly adhered must be mechanically cleaned and abraded to achieve uniformly gloss-free, open texture.

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 technical data sheet. Consult APF Technical Service for further information.

MIXING

APF Polyurea 5100 is packaged in premeasured and bulk units. Proper proportioning and homogenization are critical for success. Mixing ratio is 1A : 1B. Premix Parts A & B with separate mixing paddles to ensure no cross contamination. Do not attempt to hand mix. Be sure to move the drill around the mixing container scraping the sidewalls and bottom.

Add component B to component A and mix with medium speed drill mixer for three [3] minutes. Distribute material immediately after complete mixing.

APPLICATION

APF Polyurea 5100 is applied by roller, brush and squeegee. For detailed installation instructions, see related APF System installation instructions.

Polyurea 5100 is a very reactive material and requires special application techniques. It may be brushed or rolled. Easy application is accomplished by pouring the freshly mixed product on the floor, spreading to the desired thickness with a rubber squeegee, and finish rolling immediately with an 3/8" inch solvent resistant core roller. The mechanic rolling the material should wear spiked shoes to walk on the wet material. Because the material sets quickly, change roller covers every hour.

Mixed material must be spread immediately after mixing. On large jobs, be sure to have enough workforce to maintain a wet edge. Do not apply at more than 10 mils. **Product applied at excessive thickness will result in surface defects.**

LIMITATIONS

- Not suitable for constant temperature exposure over 175°F (80°C)
- Prior to application, measure and confirm that ambient temperature and humidity conditions are at least 5°F over dew point.
- Do not exceed 10 mils wet film thickness. Surface defects will occur.
- Work life is considerably shortened over 90 degrees F.
- Do not apply material if the humidity is over 80% and/or poor ventilation/limited air changes. Improper cure will result.

SHELF LIFE

One [1] year from date of manufacture, in original unopened container. Store away from heat sources. Store between 50°F and 85°F (10°C – 30°C). Do not allow to freeze. Frozen material is unusable and must be properly disposed of.

HANDLING & SAFETY

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin; wear protective gloves. User must read and understand Safety Data Sheet before using. APF Safety Data Sheets are available at www.apfepoxy.com

APF Polyurea 5100 01.04.24

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.