

## **POLYURETHANE 100**

### PRODUCT DESCRIPTION

APF Polyurethane 100 is a two component, high solids, aliphatic polyurethane coating. Offering a combination of unique performance properties, APF Polyurethane 100 produces a high-gloss protective film which is very hard, flexible and impact resistant. APF Polyurethane 100 features excellent resistance to abrasion and scratching. APF Polyurethane 100 exhibits durability in exterior applications, an easily cleaned surface, and excellent resistance to a broad range of chemicals. This product is formulated with an integral UV additive for excellent performance in sunlight and strong artificial light. A curing accelerator is available when rapid project turnaround is desired (required for Satin finish).

APF Polyurethane 100 is designed as a high-performance topcoat for protective coating and seamless flooring applications. It provides maximum cleanability and stain resistance when used as a finish coat in color chip flooring or epoxy-quartz flooring. Available in optional Satin finish.

### **ADVANTAGES**

- Resistant to fuels and many chemicals
- Hard, high-gloss, easily cleaned surface
- Graffiti resistant when used as wall surface

## **USES**

- Finish for color quartz and vinyl mosaic flake systems
- Automotive facilities
- Aircraft Hangars
- Clean Rooms

### **COLORS**

Factory Supplied 10 Standard Colors. Satin only available in Clear.

## **PACKAGING**

Supplied in complete A+B 1.5 gallon (5.7 L) or 15 gallon (56.8 L) total volume mixed units. Use only as complete mixed unit, do not break down into partial mixes. Mix ratio 2A: 1B

TECHNICAL DATA	
Mixing Ratio by Volume	2A:1B
VOC Clear	185 g/l
VOC Pigmented	197 g/l
Solids Content, by Volume, Pigmented	62%
Solids Content, by Volume, Clear	60%
Gloss (60 degrees) ASTM D523 - 14 Satin finish	90 - 95 50-60
Hardness ASTM D4366 (Konig)	122
Tabor Abrasion (100 gm. load 100 cycles, CS 17 wheel)	38 mg Loss
Flexibility ASTM D222	Passes 1/8-inch
Impact Resistance ASTM D2794	Passes 120 inch- pound direct and reverse
Re-coat Final Flooring Application	~5 - 6 Hours
Dry Times (77°F)	
Dry To Touch	~4 - 6 Hours
Recoat	~10 - 12 Hours
Light Traffic	~24 Hours
Full Traffic Higher temperatures will shorten cure time will increase cure time.	/-

## **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.

## **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 war-



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PRODUCT DATA SHEET

## PREPARATION, cont.

ranty. 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.

### MIXING

Mix only that amount of material that can be used in a 2 hour period at 77°F. Higher temperatures and the addition of accelerator will reduce work time. In hot weather, mix smaller batches. If using the pigmented system, thoroughly premix part A before adding part B. Mixing ratio is 2 parts A to 1 part B. For Satin version, Premix Parts A & B with separate mixing paddles to ensure no cross contamination. Proportion the amounts carefully and mix for two full minutes using a 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. Reseal partially used containers completely after use. Avoid contamination with moisture. B component will react with moisture.

### **APPLICATION**

APF Polyurethane 100 may be applied by brush or roller. Apply at 250-350 sq. ft. per gallon with quality 3/8- or 1/4-inch nap solvent resistant core roller as a finish coat over primed concrete. If using the satin version of this material, it is very important to achieve a uniform application rate of 300 - 350 sq. ft. per gallon. Heavier films will be glossier, thinner applications will be flatter.

### **LIMITATIONS**

- Use only on primed substrates. Do not apply directly to concrete.
- Prior to application, measure and confirm that ambient temperature and humidity conditions are at least 5°F over
- Use of kerosene or propane forced air heating equipment during application may cause discoloration and finish
- 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  $85^{\circ}F$  ( $10^{\circ}C - 30^{\circ}C$ ). Do not allow to freeze. Frozen material is unusable and must be properly disposed of.

## **HANDLING & SAFETY**

Material is combustible. Extinguish all flames, pilot lights, and electric motors until all vapors are gone and the coating is hard. The vapor is harmful. Use only with adequate ventilation and appropriate cartridge-type respirator as application conditions require. Avoid contact with skin; wear protective gloves. Application personal must read and fully understand product Safety Data Sheet before using. APF Safety Data Sheets are available at www.apfepoxy.com

## STANDARD WARRANTY STATEMENT

APF POLYURETHANE 100 PDS 01.04.24
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 responsion sibility 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 OLIR 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 OBLIGA-TION 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.

