#### PRODUCT DESCRIPTION

APF POLY 501 is a high-solids, two-component, water-based high-performance coating. This unique product provides performance properties equal to conventional solvent-based catalyzed urethanes. APF POLY 501 is VOC compliant in California. It offers substantial performance improvements over catalyzed water-based polyurethanes, including higher film build capabilities.

APF POLY 501 provides a hard, durable coating that features good gloss, easy cleanability, and superior abrasion resistance. Resistance to yellowing from UV light is excellent. For exterior desert applications, an integral UV absorber package is added to ensure long-term chalk resistance and gloss retention.

Developed as a high-performance finish coat for seamless flooring and architectural applications.

APF POLY 501 is the ideal top coat for areas that require maximum gloss retention, ease of cleaning, and resistance to heavy foot traffic. Typical areas of application would include clean rooms, hospitals, concrete counter tops, and high traffic retail areas.

APF POLY 501 is also suitable for aircraft hangars, automotive repair facilities, and garage floors. It is available in matte & satin finishes.

## **ADVANTAGES**

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

#### **COLORS**

Available only in Clear, Satin and Matte. DO NOT field tint.

## **PACKAGING**

Supplied in complete A+B 1.5 gallon (5.7 L) or 15 gallon (56.8 L) total volume mixed units. Mix ratio 2A: 1B

TECHNICAL DATA	
Mixing Ratio by Volume	2A:1B
VOC Clear	44 g/l
Solids Content, by Volume	58.5%
Gloss (60 degrees) ASTM D523 - 14	90
Hardness ASTM D4366 (Konig)	175
Tabor Abrasion (1000 gm. load 1000 cycles, CS 17 wheel)	39 mg Loss
Re-coat Final Flooring Application	~5 - 6 Hours
Dry Times (77°F)	
Dry To Touch	~6 Hours
Recoat	~12 Hours
Light Traffic	~18Hours
Full Traffic	~7 Days

Higher temperatures and lower relative humidity will shorten cure time. Lower temperatures and higher relative humidity 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



## SURFACE PREPARATION CONT.

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.

#### MIXING

Mix only that amount of material that can be used in a 3 hour period at 77°F. Higher temperatures reduce work time. In hot weather, it is advisable to mix smaller batches. Premix Part A before adding part B. Mixing ratio is 2 parts A to 1 part B. For Satin and Matte versions, Premix Parts A & B with separate mixing paddles to ensure no cross contamination. Add part B slowly while mechanically agitating part A with a slow speed drill. Mix for 2 full minutes until completely homogenized. It is important to NOT whip air into the material while mixing. Material cannot be properly mixed by hand. Use a small "squirrel cage" mixer for mixing small amounts.

## **APPLICATION**

APF Poly 501 should be applied 250-350 sq. ft. per gallon by brush or roller. Use solvent resistant 1/4 or 3/8-inch nap roller. Do not allow to puddle or accumulate in joint areas. Applications heavier than 200 sq. ft. per gallon will create bubbles in the cured coating. If multiple coats are required, and the material has cured for more than 24 hours, de-gloss with a Red ScotchBrite® janitorial abrasive pad or fine sanding screen.

For Satin and Matte application require uniform thickness to produce uniform finish results. Uneven coverage rates will produce differences in the Gloss.

### **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.

## **LIMITATIONS**

- Material must be mixed mechanically for proper performance. Hand mixing is not acceptable.
- Application rate must be kept above 200 sq. ft. per gallon (8 mils) to avoid curing bubbles that occur in thicker applications.
- Applications over textured surfaces such as trowel-knockdown polymer concrete must be pulled tightly to avoid leaving excessive product in recessed areas.
- Not formulated for pigmentation, do not add color.
- 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.

# **HANDLING & SAFETY**

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 <a href="https://www.apfepoxy.com">www.apfepoxy.com</a>

STANDARD WARRANTY STATEMENT

APF POLY 501 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 responsions 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 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 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.

