

PRODUCT DESCRIPTION

APF EPOXY 450 is a medium viscosity, 100% solids resin system used in a variety of flooring applications including high build coatings, aggregate-filled flooring, and decorative vinyl mosaic flake, color quartz, and epoxy pebble applications. APF EPOXY 450 provides an outstanding balance of physical strength and ease of application. APF EPOXY 450 has excellent clarity for use with color quartz aggregate and decorative flake systems.

APF EPOXY 450 is a medium viscosity product for improved flow and handling at lower temperatures and excellent application qualities. The medium viscosity allows for the addition of fine silica fillers for easy application of "slurry" type floors. A Fast Cure hardener is available when cold weather cure down to 40°F (4.5°C) or accelerated room temperature cure is required. The versatility of APF EPOXY 450 makes it ideal as a primer, finish coat or aggregate binder in a wide variety of flooring applications.

USES

- Manufacturing
- Pharmaceutical
- Warehouse
- Retail
- Health Care & Institutional
- Correctional Facilities
- Veterinary/Animal Care

ADVANTAGES

- May be used as a primer, finish coat, or aggregate binder

COLORS

Clear & 12 standard color pigment packs. Safety colors are available only in pigment packs.

PACKAGING

Supplied in complete A+B 1.5 gallon (5.68 L), 15 gallon (56.8 L) or 165 gallon (625 L) total volume mixed units.
Mix ratio 2A : 1B

COVERAGE

100-200 sqft/gallon (8-16 mils WFT)

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.

TECHNICAL DATA

Mixing Ratio by Volume	2A : 1B
VOC Clear	<50 g/l
VOC Pigmented	<50 g/l
Solids Content, by Volume	100%
Hardness, Shore D ASTM D-2240	78
Tensile Strength psi (ASTM D-638)	6,230
Elongation, % (ASTM D-638)	11%
Compressive Strength, psi (ASTM D-695)	19,501
Yield Strength, psi (ASTM D-695)	9,850
Flexural Strength, psi (ASTM D-790)	9,680
Bond Strength to Concrete (ASTM D-4541)	>450 psi, concrete fails
Cure Time (77°F)	
Pot Life	20 Minutes
Dry to Touch	~12 Hours
Recoat	~12 - 24 Hours
Full Cure	~7 Days
Fast Cure, Dry to Touch	~3 Hours
Fast Cure, Recoat	~7 - 24 Hours
Full Cure	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.

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.

Pigment Pack: Pour color in its entirety into the A component and blend thoroughly until complete mix is achieved, approximately 2-4 minutes. 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

As a Primer: Apply material onto surface immediately after mixing with a squeegee, back roll using a quality solvent resistant 3/8-inch nap roller cover. Apply a thin layer at 200 sqft/gallon (8 mils WFT). 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.}

As a Coating: Apply material onto surface immediately after mixing with a squeegee, back roll with using a quality solvent resistant 3/8-inch nap roller cover. Apply at a rate of 100-200 sqft/gallon at 8-16 mils WFT. 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 80-100 grit to a uniform gloss free and dust free texture prior to recoat.

LIMITATIONS

- Before applying, measure and ensure that the ambient temperature is at least 5°F above the dew point.
- High humidity/low temperature will prolong cure time
- Use of kerosene or propane forced air heating equipment during application may cause discoloration and finish defects.

SHELF LIFE

Part A: Clear: 24 months at 50-85F { 10-30C }

Pigmented: 12 months at 50-85F { 10-30C }

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

*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.

APF Epoxy 450_PDS_07.17.25

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.

