

# **ACTIPEL FP-90™**

## **TECHNICAL DATA SHEET**

**Actipel FP-90 is a premium performance, Low VOC, water-based fluoropolymer concentrate. Unique repellency properties and excellent compatibility combine to make Actipel FP-90 the logical choice for formulating coatings and sealers with superior oil, water, and stain repellency.**

- **Unrivaled Oil & Water, Stain Repellency**
- **Does Not Alter Appearance of Surface**
- **Resists Soils, Most Stains, Chemical Degradation, Efflorescence, Etching**
- **Vapor-Permeable: Reduces Cracking, Spalling, Freeze/Thaw Damage**
- **Imparts Very Low Surface Energy to Substrates**
- **Water Based — Very Low VOC**
- **Ambient Cure**
- **Readily Dilutes In Water/Alcohol/Glycol Mixture With Excellent Shelf Stability**
- **Non-Acidic: Safe For Use On Surfaces That Will Etch (e.g. Polished Limestone, Marble)**
- **Good Stability On Alkaline Surfaces (e.g., Concrete, Grout, Masonry)**
- **Physically and Chemically Bonds To Substrates: UV Resistant, Increased Coating Life**
- **Products formulated with Actipel FP-90 meet all current VOC regulations**
- **Concentrated Raw Material Can be Formulated at Various % Active Levels to Create Several Different Products for Many Different Applications**
- **Can be used as an Surfactant / Additive in Aqueous Formulations Where Low Surface Tension is Desired (Improves Flow, Leveling, Wet-Out)**

## APPLICATIONS

- **Stone Sealers:** Natural Stone Substrates, Marble, Limestone, Travertine, Granite
- **Tile Sealer** - Saltillo, Clay, Concrete, Porcelain
- **Concrete Sealers** - Cementitious Surfaces - Concrete, Grouts, Concrete Masonry Block, Precast, Terrazzo
- **Grout Sealers:** All types including sanded, un-sanded, polymer enhanced, and standard grout
- **Wood Sealer:** Including Pressure Treated Lumber, Composite / Engineered Wood
- **Oil Water Stain Repellent for Flexible Substrates**
- **Release Coatings**
- **Surfactant / Coatings Additive**

## TYPICAL PROPERTIES

Appearance	Beige to tan emulsion
Ionic Nature	Anionic
Density @ 25oC	1.12 +/- 0.02 g/ml (9.6 lbs/gal)
pH (as supplied)	8-10
Water Solubility	Dispersible
Boiling Point	~100 °C
Actives	28%

## FORMULARY

Actipel FP-90 is a highly concentrated anionic fluorochemical dispersion that readily dilutes in deionized or softened water and aqueous co-solvent solutions. It can be co-applied / formulated with a broad range of materials including; UV absorbers, color enhancers, polymers, resins, pigments, waxes, and many other commonly used raw materials. Of course, excellent products can be also made by simply diluting Actipel FP-90 with water or water /co-solvent. Recommended dilution rates vary from 3% to 11% as supplied depending on the application, application rate, porosity of the substrate, desired performance and cost parameters.

**Dilutions:** Hard surface applications and coverage rates will vary depending on the surface and the performance required, but typically 10% Actipel FP-90 will provide excellent repellency on grout, wood, concrete, brick, stucco, pavers and tile when applied at the rate of 1 gallon per 200 to 400 square feet. Low porosity stones and surfaces will yield higher coverage.

**Storage:** Addition of suitable biocide/fungicide recommended for long-term storage of diluted material - especially when isopropanol is not used as a co-solvent. Pursuit Materials recommends that the formulator submit final products to their biocide/fungicide manufacturer to verify the efficacy of the package.

**Note:** Cure time for maximum water protection is approximately 24 to 72 hours; however, repellency will start to develop much sooner. Application rates, concentration of Actipel FP-90, and temperature/humidity can impact dry/cure times. Smooth any pooled material with cloth, sponge, or brush. If a second coat is needed, apply as soon as possible or the first coat may begin to repel the second.

### Example Formulation:

Warm and mix 12% Actipel FP-90 with 3% Isopropanol and 3% Glycol Ether EB to approximately 50 Centigrade to form a clear solution. While still warm, add 82% deionized water with mixing to form a clear final product that is ready to apply.

Note: Warming step gives the best final product clarity; however, room temperature blends give very acceptable final products also.

## PACKAGING/HANDLING

Actipel FP-90 is available in totes (Net Wt. 2205 lbs), 55-gallon drums (Net Wt. 441 lbs) and 5-gallon pails (Net Wt. 40 lbs). DOT Classification is Non Regulated.