

Fluorsurfactants

Advanced Polymer, Inc. fluorsurfactants (APFS Series) are a unique class of additives that produce low surface tension properties in aqueous and solvent-borne systems. Fluorsurfactants impart excellent wetting, spreading and leveling properties to a variety of systems including architectural and plastic coatings, inks, waxes, polishes and high solids coatings.

	pH	Specific Gravity	Ionic Nature	Solubility in Water	Solid Content	Appearance	Uses
APFS-14	6.5	1.03	Amphoteric	High	27.0%	Clear-slightly amber liquid	Detergents, Antifogging Agent, Wetting Agent
APFS-16	-	0.83	Nonionic	Insoluble	22.0%	Light yellow transparent solution	Produces stable foams in low polarity hydrocarbon liquids

Superior Performance at Low Concentrations

Advanced Polymer, Inc. (API) fluorsurfactants allow formulators to create coatings that will penetrate low surface energy substrates. Unlike hydrocarbon and silicone surfactants, fluorsurfactants both reduce surface defects such as craters and pinholes, and lower surface tension. API fluorsurfactants dramatically reduce surface tension at very low concentration (typically between 0.05% and 2% of total formulation). This allows the formulator to reduce the formulation cost while improving wetting.

Surface Tension at 77° F (dynes/cm)	
In Water	APFS-14
0.01%	20.50
0.10%	16.00

Advanced Polymer, Inc. Fluorsurfactant Applications

In some formulations, API fluorsurfactants are combined with hydrocarbon and silicone surfactants. This can reduce the formulation cost while increasing the effectiveness of the coating. Also, the combination of fluorsurfactant with other types may reduce the overall loading level of the surfactants in the formulation, while maintaining or improving wetting effect. All Advanced Polymer, Inc. fluorsurfactants are stable in both acidic and basic solutions.

Advanced Polymer, Inc. Fluorosurfactant Guide

Fluorosurfactant	Product Description
<u>APFS-14</u>	An amphoteric, polyfluoroalkyl betaine surfactant. The primary function of APFS-14 is the reduction of surface tension in aqueous solutions. APFS-14 will improve the wetting and penetration properties on porous substrates such as wood, non-woven fabrics, and construction materials. APFS-14 is very stable in alkaline conditions and is an excellent foaming agent.
<u>APFS-16</u>	A nonionic fluorochemical solution that will produce stable foams in low polarity hydrocarbon liquids such as kerosene and diesel fuel.

Advanced Solutions

Advanced Polymer, Inc. has been a respected provider of a variety of technically innovative specialty chemicals for almost 40 years. We combine a wealth of experience with our R&D resources, and the responsiveness of our technical and customer services, to support our customers. We work closely with our customers to develop environmentally compliant products for a variety of applications across a range of industries including architectural, industrial, specialty coatings, release coatings, textiles, inks, adhesives, automotive and personal care products.

Let us put the API advantage to work for you.

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