

# DuPont™ Capstone® Fluorosurfactant FS-34

## TECHNICAL INFORMATION

### Description

- FS-34 is a general-purpose, water-soluble, ethoxylated nonionic fluorosurfactant that modifies surface energies at very low concentrations
- FS-34 is VOC-free, APEO-free, non-flammable and is compatible with additives and resins of any ionic class
- FS-34 is stable in acidic, basic, brine and hard water environments
- Due to its good stability across a broad pH range, FS-34 is an ideal wetting and leveling agent for many aqueous applications
- FS-34 is effective as a plating bath aid by reducing drag-out from bath applications. Additionally, it can be used in coatings to reduce surface defects and to lower surface tension in many types of cleaning formulations

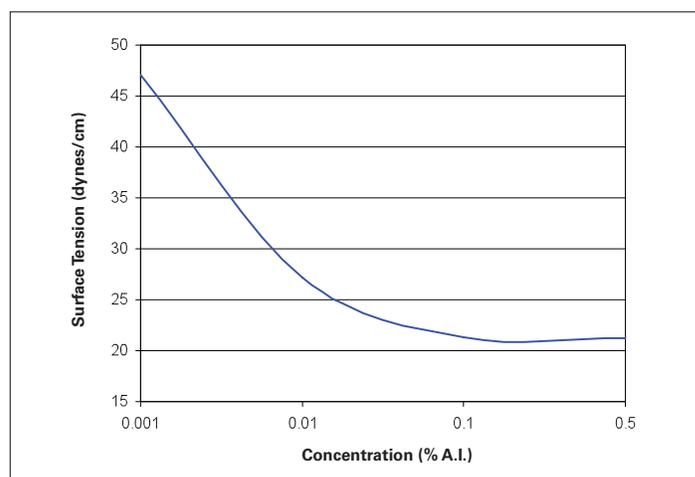
### Typical Properties

Appearance	Light yellow to amber liquid
pH	5.5–7.5
Specific Gravity	1.1
Stability	Freeze-thaw stable. Mix well before use. Stable in brine and aggressive media.
Composition	25% solids 75% water
Shelf Life	5 years

### Performance

#### Surface Tension

##### Static Surface Tension in Deionized Water: FS-34



#### Foaming

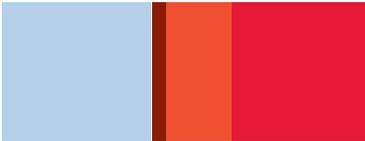
- Moderate to high foamer

##### Ross-Miles Foam Volume (mL) at 25 °C (77 °F) at 0.1% A.I. (Active Ingredient)

	Initial	5 min	10 min	15 min
DI Water	153	143	143	140
10% NaCl	121	121	120	120



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## Applications

### Water-based floor finishes, waxes and polishes

- Provides wetting and leveling
- Good re-wet characteristics in multi-coat applications
- Reduces cratering and provides faster spreading
- Compatible with hydrocarbon surfactants
- Suggested use rates are 0.005–0.02% active ingredient

### Concentrated cleaning solutions

- Reduces surface tension and provides excellent wetting to achieve cleanability
- Provides improved wetting and penetration, especially with difficult to wet soils
- Suggested use rates are 0.005–0.1% active ingredient

### Aqueous-based paints and inks

- Excellent wetting and leveling, reduced orange peel effect, extend the open-time
- Suggested use rates are 0.01–0.1% active ingredient in aqueous-based paints

### Stability and surface activity in brine and aggressive (acidic and basic) media

## DuPont™ Capstone® Repellents and Surfactants:

- Deliver more sustainable solutions with maximum performance
- Are short-chain molecules that cannot break down to PFOA in the environment
- Are supported by an in-depth foundation of data
- Are in compliance with REACH requirements
- Are listed on TSCA inventory
- Meet the goals of the U.S. Environmental Protection Agency 2010/15 PFOA Stewardship Program

**For questions regarding technical data, commercialization, and sampling:**

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