Capstone™ FS-30
Fluorosurfactant

Technical Information

Description
Capstone™ FS-30 is a general-purpose, water-soluble, ethoxylated nonionic fluorosurfactant that modifies surface energies at very low concentrations. FS-30 is VOC-free, APEO-free, and compatible with additives and resins of any ionic class. FS-30 is stable in acidic, basic, brine, and hard water environments.

Due to its good stability across a broad pH range, FS-30 is an ideal wetting and leveling agent for many aqueous applications. It 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 lower surface tension in many types of cleaning formulations.

Applications
Water-Based Floor Care (Finishes, Waxes, and Polishes)
- Excellent wetting and leveling, reduced orange peel effect, extends open time
- Good re-wet characteristics in multi-coat applications
- Reduces cratering and provides faster spreading
- Compatible with hydrocarbon surfactants
- Suggested use rates are 0.01–0.05% active ingredient (A.I.)

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 0.01–0.1% A.I.

Aqueous-Based Paints and Inks
- Excellent wetting and leveling, reduced orange peel effect, extends open time
- Suggested use rates are 0.01–0.1% A.I. in aqueous-based paints

Stability and Surface Activity in Brine and Aggressive (Acidic and Basic) Media

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Light yellow to amber liquid</td>
</tr>
<tr>
<td>pH</td>
<td>7-8.5</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.1 g/mL</td>
</tr>
<tr>
<td>Stability</td>
<td>Freeze-thaw stable. Mix well before use. Stable in brine and aggressive media.</td>
</tr>
<tr>
<td>Composition</td>
<td>25% solids</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>5 years</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Nonflammable</td>
</tr>
</tbody>
</table>
Biodegradability Status

FS-30 was tested by OECD 301B or 67/548/EEC Annex V.C.4-C method and found to meet the criteria to pass, which is 60% or greater theoretical CO₂ (ThCO₂) production within 28 days. If you have questions regarding the results of this test or the interpretation of the results from this study, please contact your Chemours representative.

Capstone™ Repellents and Surfactants
- Deliver more sustainable solutions with maximum performance
- Are in compliance with REACH requirements
- Are listed on TSCA inventory

For questions regarding technical data, commercialization, and sampling:

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Performance

Surface Tension

<table>
<thead>
<tr>
<th>Concentration (% A.I.) in Deionized (DI) Water</th>
<th>0</th>
<th>0.05</th>
<th>0.1</th>
<th>0.15</th>
<th>0.2</th>
<th>0.25</th>
<th>0.3</th>
<th>0.35</th>
<th>0.4</th>
<th>0.45</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capstone™ FS-30 Surface Tension</td>
<td>80</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Foaming
- Moderate to high foamer

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

<table>
<thead>
<tr>
<th>Initial</th>
<th>5 min</th>
<th>10 min</th>
<th>15 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI Water</td>
<td>159</td>
<td>159</td>
<td>159</td>
</tr>
<tr>
<td>10% NaCl</td>
<td>115</td>
<td>112</td>
<td>110</td>
</tr>
</tbody>
</table>

For more information, visit www.capstone.chemours.com

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