Innospec Active Chemicals, in partnership with The Huntsman Chemical Company, is pleased to introduce an innovative, new mild surfactant for use in detergents and personal care applications.

Pureact SCMI-85 Sodium Cocoyl Methyl Isethionate (SCMI) is a breakthrough in surfactant chemistry.

Its excellent water solubility properties make it ideal for use in clear liquid cleansing systems where a dense, luxurious foam and elegant after-feel is desired. It produces good slip and low tack on drying. The secondary ester structure of Pureact SCMI-85 makes it more hydrolytically stable compared to most common esters. It therefore displays excellent hydrolytic stability over broad pH ranges making formulating easy. SCMI is ideal for use in shower gels, facial cleansers, shampoos, liquid cleansing systems, and luxury foam baths and can be used either as a secondary or primary surfactant in formulated systems.

Pureact SCMI-85 can also be used to prepare high performance, “sulfate free” personal cleanser products.

**Performance Benefits**

![Graduated cylinder inversion foam test](image-url)

<table>
<thead>
<tr>
<th></th>
<th>Thick tight bubbles</th>
<th>Thick tight bubbles</th>
<th>Large loose bubbles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pureact SLMI-85 100%</td>
<td>480</td>
<td>480</td>
<td>480</td>
</tr>
<tr>
<td>Pureact SLMI-85 75% CAPB 25%</td>
<td>460</td>
<td>460</td>
<td>460</td>
</tr>
<tr>
<td>Pureact SLMI-85 25% CAPB 75%</td>
<td>440</td>
<td>440</td>
<td>440</td>
</tr>
<tr>
<td>SLES-70 100%</td>
<td>420</td>
<td>420</td>
<td>420</td>
</tr>
<tr>
<td>SLES-70 75% CAPB 25%</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

0 Minute foam | 15 Minute foam
Evaluating at 0.1% concentration
Clarity
Sufficient use of a chelating agent is necessary to achieve clarity in systems containing Pureact SCMI-85.

Foaming Profile
Pureact SCMI-85 has a similar flash foam profile as Sodium Laureth Sulfate. However, whereas SLES forms large loose bubbles, SCMI forms thick tight long-lasting bubbles.

Thickening
While salt alone has the ability to thicken Pureact SCMI-85, the addition of a secondary surfactant such as Cocamidopropyl Betaine or Sodium Lauroamphoacetate can be used to further enhance viscosity.
**pH Stability**

Pureact SCMI-85 shows excellent stability over a broad pH range as well as a broad temperature range. However, SCMI may show some cloudiness at lower temperatures but clears over time as the product returns to room temperature.

The use of select secondary surfactants can help improve cold temperature stability.

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**SCMI activity @ 25°C**

![Graph showing SCMI activity at 25°C over various pH levels from Day 0 to Day 30.]

**SCMI activity @ 50°C**

![Graph showing SCMI activity at 50°C over various pH levels from Day 0 to Day 30.]

10% SCMI pH stability @ 25°C

10% SCMI pH stability @ 50°C

Product Specification (Not intended for use in preparing specifications)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Off-white flakes</td>
</tr>
<tr>
<td>Ionic nature</td>
<td>Anionic</td>
</tr>
<tr>
<td>Activity</td>
<td>80%</td>
</tr>
<tr>
<td>Free fatty acid</td>
<td>10%</td>
</tr>
<tr>
<td>pH, 10% solution</td>
<td>5.0</td>
</tr>
</tbody>
</table>
Recommended Use Directions

• Add sufficient level of chelating agent such as Natriquest E30* to water and mix
• Add Pureact SCMI-85, begin heating to ~60°C and continue to mix until all of the Pureact SCMI-85 is dissolved and the solution becomes clear
• Add remaining materials and cool solution once uniform
• If desired, adjust pH
• If desired, electrolytes such as Sodium Chloride can be added to increase viscosity

* INCI: Trisodium Ethylenediamine Disuccinate, Biodegradable Chelating Agent

For further information, please email your region:
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