ACULYN™ 38  Rheology Modifier

Description

ACULYN 38 is an alkali-swellable anionic acrylic polymer emulsion (ASE) that is lightly crosslinked to impart a short pseudoplastic flow. It is a liquid, cold-processable product that instantaneously thickens upon neutralization providing ease of handling and increased manufacturing efficiency. This thickener is offered at 28% solids and has been developed for use as a rheology modifier and suspending agent for personal care surfactant formulations. It is effective in a range of personal care surfactants and is useful at pH 3-11, depending on formulation. It is stable in the presence of sodium chloride and two common conditioning agents, Polyquaternium-7 and Polyquaternium-10 as well as, polar solvents and zinc pyrithione. The polymer has a well-established toxicological profile and is safe in normal use.

Features

- Stable in highly alkaline systems
- Particulate suspension
- Polar solvent compatibility
- Instant neutralization/thickening
- Short flow
- Cold-processable/liquid
- Divalent ion tolerance
- Excellent viscosity stability
- Yields clear gels
- Flat pH/viscosity response
- Lack of odor
- Excellent high shear stability

Benefits

- Easy to handle
- Formulations exhibit little viscosity drift
- No predisolution necessary
- Compatible with nonionic and anionic surfactants
- Non-hygroscopic
- Permits stable formulations with particulates
- Increased manufacturing efficiency
- Formulation of spreadable lotion products that flow readily from the container
- Allows for use of continuous production processes with use of in-line static mixers
- Ability to stabilize suspensions
- Less sensitive to water hardness
- Able to formulate clear products
- Does not promote or support contamination, unlike natural thickeners
- Mild, soft, non-greasy, non-sticky
- No watery feel upon skin contact
- Flexibility in choice of preservative system
- Improved pickup properties
- Supported by comprehensive environmental, health and safety data
Physical Description
The values presented in this chart should not be considered as product specifications.

<table>
<thead>
<tr>
<th>INCI name</th>
<th>Acrylates/Vinyl Neodecanoate Crosspolymer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association</td>
<td>None</td>
</tr>
<tr>
<td>Ionic nature</td>
<td>Anionic</td>
</tr>
<tr>
<td>Appearance</td>
<td>Milky liquid</td>
</tr>
<tr>
<td>Solvent</td>
<td>Water</td>
</tr>
<tr>
<td>Solids</td>
<td>29</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>2.7</td>
</tr>
<tr>
<td>Density</td>
<td>1.05</td>
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<tr>
<td>Equivalent weight</td>
<td>239</td>
</tr>
<tr>
<td>Rheology</td>
<td>Short, smooth</td>
</tr>
<tr>
<td>Shear thinning</td>
<td>Moderate</td>
</tr>
<tr>
<td>Viscosity, mPa s (as supplied)</td>
<td>≤150</td>
</tr>
</tbody>
</table>

Additional Literature

Formulations

Hair care

Lovable Locks Conditioning Shampoo with Anti-frizz
Anti Dandruff Shampoo
Pearlized Conditioning Shampoo with Silicone Emulsion
Pearlized Conditioning Shampoo with Silicone Fluid

Skin care

Shower Power Citrus Shower Gel with Gentle Micro Beads
Low pH Suspending Body Wash
Suspending Body Wash

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Material Safety Data Sheets outlining known health and safety hazards and handling methods for our products are available on request.

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