CLEAR, COLORLESS SHAMPOO

No. 643

Description
This colorless liquid makes an excellent shampoo with good foaming and rinseability. The formulation may also be used in bubble bath and hand soap applications.

Formulation

INGREDIENTS:

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>Fragrance, Preservative</td>
<td>Citric Acid</td>
</tr>
<tr>
<td>STEPAN-MILD® LSB</td>
<td></td>
<td>Sodium Chloride</td>
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<tr>
<td>STEOL® CS-230</td>
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<tr>
<td>NINOL® 96-SL</td>
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<table>
<thead>
<tr>
<th>Total</th>
<th>% by Weight</th>
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<tbody>
<tr>
<td></td>
<td>q.s. to 100.0</td>
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<tr>
<td></td>
<td>24.00</td>
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<td></td>
<td>15.40</td>
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<tr>
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<td>2.00</td>
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</table>

| Total | 100.0 |

Procedure
Combine ingredients in Phase 1 in a container and heat to 165 ºF with mixing. When system is uniform, with mixing, cool to 110 ºF, add Preservative and Fragrance. Adjust pH to 5.5 with Citric Acid. Adjust viscosity with Sodium Chloride.

Physical Properties

Appearance, 25ºC Clear, colorless liquid

pH, as is 5.5

Viscosity:

- with 0.50% NaCl, cps 2900
- with 0.75% NaCl, cps 7200
- with 1.0% NaCl, cps 9400

Storage/Stability

- 6 weeks at 40 ºF Stable
- 6 weeks at 110 ºF Stable
- 6 weeks at 120 ºF Stable
- 3 freeze/thaw cycles Pass

Instructions for Use
Wet hair, lather, and rinse.

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- STEPAN-MILD®
- STEOL®
- NINOL®

For Additional Assistance
For applications or product handling assistance, call our Technical Service Department at 1-800-745-7837 (U.S.) or 011-334-76-505-100 (Europe).
For ordering assistance, call our Account Service Department at 1-800-457-7673.

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