**GREENER CAR WASH CONCENTRATE**

**No.**
1102

**Description**
This consumer-type formulation is designed for easy dilution while generating a large amount of stable foam.

**Formulation INGREDIENTS:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>% by Weight</th>
<th>Functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>q.s. to 100.0</td>
<td>Solvent</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>4.0</td>
<td>Thickener</td>
</tr>
<tr>
<td>ALPHA-STEP® PC-48</td>
<td>20.0</td>
<td>Primary Surfactant</td>
</tr>
<tr>
<td>AMMONYX® LMDO</td>
<td>10.0</td>
<td>Foam Booster</td>
</tr>
<tr>
<td>AMPHOSOL® HCG</td>
<td>5.0</td>
<td>Secondary Surfactant</td>
</tr>
<tr>
<td>Preservative</td>
<td>q.s.</td>
<td>Additive</td>
</tr>
<tr>
<td>Dye</td>
<td>q.s.</td>
<td>Additive</td>
</tr>
<tr>
<td>Fragrance</td>
<td>q.s.</td>
<td>Additive</td>
</tr>
</tbody>
</table>

**Total**
100.0

**Procedure**
1. Charge tank with Deionized Water.
2. Add ingredients in order shown above and mix until homogenous.

**Physical Properties**
- Appearance at 25°C: Clear liquid
- Viscosity at 25°C, cps: 400
- pH, as is: 7.0
- Solids, %: 16.75

**Storage/Stability**
- 4 weeks at 50°C: Stable
- 4 weeks at 25°C: Stable
- 4 weeks at 4°C: Stable
- Freeze/Thaw, 3 cycles: Stable

**Instructions for Use**
Dilute 1–2 ounces per 1 gallon of water.

Foaming performance is unsurpassed to commercially available products in both Ross-Miles and Shake Foam Tests.

**External Comment**
Marketing Notes: When used at Stepan's recommended dilution level, this formulation is VOC-compliant with U.S. Federal and California Air Resource Board (CARB) Consumer Products regulation for non-aerosol, motor vehicle wash (0.2% VOC limit as of December 31, 2012). BCI = 84. Total BCI (Biorenewable Carbon Index) was calculated only for the Stepan surfactants used in this formulation. ALPHA-STEP® PC-48 and AMMONYX® LMDO are both approved ingredients on www.cleangredients.org. For further information, visit our website or www.cleangredients.org. The use of the term "green" or "greener" on the finished product or label is at the sole risk of the finished product manufacturer, for which Stepan bears no responsibility. Label and/or trademark usage of the final product is the sole responsibility of the finished product manufacturer. This product contains does not contain Nonylphenol Ethoxylates (NPEs).
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.

Nothing contained herein grants or extends a license, express or implied, in connection with patents, issued or pending, of the manufacturer or others. The information contained herein is based on the manufacturer's own study and the works of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information.