**STEPAN-MILD® GCC**

**Chemical Structure**

n = 57% C₆H₁₂, 43% C₆H₁₆

STEPAN-MILD GCC is Glycerol (Caprylate/Caprate). It is made by esterification of glycerin from vegetable oil sources and medium chain fatty acid from coconut or palm kernel oil.

**CAS Registry Nos.**

91744-32-0 (Alternate CAS Numbers 85536-07-8/85409-09-2)

**INCI Name**

Glyceryl Caprylate/Caprate

**Applications**

- Thickener
- Foam enhancer
- Co-emulsifier
- Reported Re-fatting agent
- Solubilizing agent

**End Product Uses**

- Shampoos
- Body washes
- Liquid soaps
- Facial cleansers
- Skin creams and lotions

**Key Attributes in Personal Care Applications**

- Safe – mild, non-sensitizing and non-irritating to eyes and skin
- PEG and EO/PO-free → No 1,4 dioxane
- Nitrogen-Free → No nitrosamines
- Can be incorporated in cold mix at any step of the process
- Good processability - shows no gelation

**Typical Properties**

- Appearance at 25 °C ................. Off-white liquid to soft paste
- Odor ................................ Fatty
- Free glycerol, % ................................. 1.3
- Acid Value, mg KOH/gm .................. 1.0
- Saponification Value, mg KOH/gm ...... 276
- Iodine Value, Wijs ............................ 0.05
- Melting Point, °C (°F) ............... 24-30 (75-86)
- Flash Point, °C (°F), PMCC ........... >94 (>201)
- Viscosity at 100 °F, cSt ................... 37.0
- Density g/ml (US lb/gal) ............... 0.992 (8.26)
- HLB .............................................. 4.8
- RVOC, U.S. EPA, % ................. 0

**Biodegradability**

Product is biodegradable. Additional information available upon request.

**Storage & Handling**

Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling STEPAN-MILD GCC. Recommended storage temperature is 65 °F to 90 °F (18 °C to 32 °C). Avoid prolonged storage above 90 °F (32 °C).

**Standard Packaging:** STEPAN-MILD GCC is available in 55 gallon drums.
Formulation

**MILD, AMIDE-FREE CLEAR BODY WASH**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Wt.% as is</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized Water</td>
<td>q.s. to 100.0</td>
<td>Solvent</td>
</tr>
<tr>
<td>STEOL® CS-230</td>
<td>28.9</td>
<td>Primary Surfactant</td>
</tr>
<tr>
<td>STEPAN-MILD® LSB</td>
<td>18.9</td>
<td>Secondary Surfactant</td>
</tr>
<tr>
<td>AMPHOSOL® HCG</td>
<td>10.0</td>
<td>Secondary Surfactant</td>
</tr>
<tr>
<td>STEPAN-MILD GCC</td>
<td>2.0</td>
<td>Thickener, foam stabilizer</td>
</tr>
<tr>
<td>DMDM Hydantoin</td>
<td>0.25</td>
<td>Preservative</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>q.s. to pH 5.5-5.7</td>
<td>pH Adjuster</td>
</tr>
<tr>
<td>Fragrance and Dye</td>
<td>q.s.</td>
<td>Additives</td>
</tr>
</tbody>
</table>

**Mixing Procedure:**
Charge vessel with Deionized Water. Start agitation. Add STEOL CS-230, STEPAN-MILD LSB and AMPHOSOL HCG. Mix well until homogeneous. Add STEPAN-MILD GCC. Mix until clear. Add DMDM Hydantoin. Adjust pH to 5.5-5.7 with Citric Acid if necessary.

**Physical Properties:**
- Appearance at 25 °C: Clear Liquid
- pH, as is: 5.5-5.7
- Viscosity at 25 °C, cps: 25,000-27,000

This product bulletin has been written in accordance with ACC’s Product Stewardship guidelines.

**A Safety Data Sheet is available upon request.**

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For Technical Service Call:
- Stepan North America: +1-800-745-7837
- Stepan Mexico: +55-11-5089-2208
- Stepan Quimica: +55-11-5089-2200
- Stepan Colombia: +571-636-2908
- Stepan Europe: +33-476-505-160
- Stepan Asia: +656-879-9855
- Stepan Philippines: +656-879-9855

For Customer Service Call:
- Stepan North America: +1-800-457-7673
- Stepan Mexico: +52-555-533-1967
- Stepan Quimica: +55-11-5089-2200
- Stepan Colombia: +57-6-8993125
- Stepan UK: +44-161-338-5511
- Stepan France: +33-476-50-51-00
- Stepan Philippines: +63-2-842-7951

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