AMLILITE® ET-CS-12

AMLILITE® ET-CS-12 is a mild foaming surfactant, suitable for skin and hair cleansing products. Derived from L-Threonine, the amino acid with hydroxyl group, L-Glutamic acid and coconut fatty acids, it produces rich foam in weakly acidic conditions, and leaves a moist and smooth feeling on the skin, without causing taut skin feeling.

- **Image map of cleansing agents**

- **Molecular Structure**

\[
\begin{align*}
R & \quad COONa \\
\text{RCH(OH)}_2(CH_3) & \quad COONa \\
\text{RCH(CH}_2)COONa & \quad RCO-Cocoyl Fatty Acid Redise
\end{align*}
\]

- **Characteristics of AMLILITE® ET-CS-12**
  - Mixture of sodium cocoyl threoninate and sodium cocoyl glutamate.
  - Natural surfactant with vegetable origin.
  - Improves foam volume and foam quality of sulfate-free cleansing products.
  - Improves rinsability and dry skin feel.

- **Foaming power**
  - AMLILITE® ET-CS-12 shows good foaming power.

- **Foaming power –pH dependence**
  - AMLILITE® ET-CS-12 shows good foaming power under weakly acidic to neutral pH range.
Material Information

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>Physical Form</th>
<th>Packaging</th>
<th>PCPC INCI Name</th>
<th>Composition (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMILITE® ET-CS-12</td>
<td>Sodium N-Cocoyl-L-Glutamate</td>
<td>68187-30-4</td>
<td>269-085-1</td>
<td>25% Aqueous Solution</td>
<td>18kg Can</td>
<td>Disodium Cocoyl Glutamate</td>
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<tr>
<td>AMILITE® ET-CS-12</td>
<td>Sodium N-Cocoyl Threoninate</td>
<td>68187-32-6</td>
<td>292-087-2</td>
<td>200kg Drum</td>
<td>Sodium Cocoyl Glutamate</td>
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<td></td>
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<tr>
<td>AMILITE® ET-CS-12</td>
<td>Water</td>
<td>90583-79-2</td>
<td>292-282-9</td>
<td>Water</td>
<td>Sodium Cocoyl Threoninate</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

**Test Formulas:**

**P**

- Sodium lauryl sulfate (50%)
- Sodium lauryl sulfosuccinate (50%)
- AMILITE® ET-CS-12 (25%)
- AMILISOFT® CS-22 (25%)
- Glyceryl caprate
- Magnesium chloride
- Betaine
- Citric acid
- Water

**Q:**

- Sodium lauryl sulfate (50%)
- Sodium lauryl sulfosuccinate (50%)
- AMILITE® ET-CS-12 (25%)
- AMILISOFT® CS-22 (25%)
- Glyceryl caprate
- Magnesium chloride
- Betaine
- Citric acid
- Water

**Physical Form:**

- 25% Aqueous Solution
- 18kg Can
- 200kg Drum
- Water

**pH:**

- 4.0
- 9.0
- 10.0
- 10.0
- 3.0
- 1.5
- 0.8
- 5.5

**Material Information**

AMILITE® ET-CS-12 improves foam volume and quality of a sulfate-free shower gel.

**Evaluation of shower gel with AMILITE® ET-CS-12**

**Method:** Foam was generated with 1mL of the shower gel and 2.5mL of tap water (40°C) on the palm for 30 sec.

**AMILITE® ET-CS-12 is suitable for a sulfate-free shower gel product.**