Biosil Basics® I-90

**Ingredient Information**

- INCI Name: Cetyl PEG/PPG – 10/1 Dimethicone
- CAS# 144243-53-8
- EINECS# Polymer Exempt

**Specifications**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>1 max</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild, typical</td>
</tr>
<tr>
<td>OH Value</td>
<td>15 - 30</td>
</tr>
<tr>
<td>Viscosity</td>
<td>900 – 2300 cps</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.437 – 1.443</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.915 – 0.945</td>
</tr>
</tbody>
</table>

**Attributes**

- Non-ionic W/O emulsifier
- Low use level
- Cold emulsifying ability
- Great for HIP and invert emulsions

**Applications**

- Hair care
- Skin care
- Color Cosmetics
- Sun care

Recommended use levels 1.50 – 2.50%

**Biosil Basics® I-90** is a distinct water in oil emulsifier. This silicone based, non-ionic ingredient provides excellent textural properties to these types of emulsions including ease of spreadability and rub-in.

Water in oil emulsions are more challenging to develop than oil and water emulsions. Typically W/O emulsions result in heavy and greasy feeling creams. One of the key benefits of using **Biosil Basics® I-90** is high internal phase emulsions (HIPE) can be formed. **Biosil Basics® I-90** has an HLB value in the range of 5.

High internal phase emulsions form light skin feel products. This unique benefit of texture is often recognized as luxurious and is associated with high end products. Additionally, **Biosil Basics® I-90** can be used in developing invert emulsions such as w/o/w or o/w/o emulsions.

Foundations and other pigmented water in oil emulsions provide excellent coverage and ease of penetration. Sunscreen formulations also benefit from **Biosil Basics® I-90**. Uniformed application of product containing inorganic sunscreen actives specifically are enhanced by forming water in oil emulsions.

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**Storage and Handling**

Before handling please read the Safety Data Sheet and container label for safe use, physical and health hazard information.

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