BioPlex® Cetylsil® PHS CE

**Ingredient Information**

INCI Name: Cetrimonium Carboxydecyl PEG-8 Dimethicone  
CAS# 1245608-83-6  
EINECS# Polymer Exempt

**Specifications**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color, Gardner</td>
<td>3 max</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear to hazy liquid</td>
</tr>
<tr>
<td>pH (as is)</td>
<td>5.0 – 8.0</td>
</tr>
<tr>
<td>Solids</td>
<td>28 - 32%</td>
</tr>
<tr>
<td>Preservative</td>
<td>Ethylhexylglycerin &amp; Caprylyl Glycol</td>
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</tbody>
</table>

**Attributes**

- Alkaline stable  
- Significant reduction in irritation  
- Increases softness and moisturization  
- Adds shine and conditioning  
- Water soluble

**Applications**

- Hair care

**BioPlex® Cetylsil® PHS CE** is the paraben and phenoxyethanol free version of our original proprietary ingredient, BioPlex® Cetylsil® PHS, which combines a fatty quaternary compound and a carboxylated silicone. BioPlex® Cetylsil® PHS CE is an excellent ingredient to incorporate into sensitive skin and scalp applications.

Designed to be ideal to incorporate into high alkaline hair treatments, BioPlex® Cetylsil® PHS CE is water soluble. High alkaline systems such as hair relaxers and permanent waving solutions affect the cuticle of the hair and can cause significant damage. The addition of conditioning agents is critical in developing formulations which will result in hair that is manageable, shiny and healthy in appearance.

One of the key benefits of this cationic silicone complex is that it is stable in high pH systems. The cationic nature of BioPlex® Cetylsil® PHS CE provides conditioning and will contribute to shine and smoothness of damaged hair. The attributes of this ingredient remain consistent even in the presence of formulations which contain ammonia or hydrogen peroxide and can readily be incorporated in reactive hair care systems where such issues are of concern.

BioPlex® Cetylsil® PHS CE can also be incorporated into hair color applications to enhance the overall appearance of the hair.

**Storage and Handling**

Before handling please read the Safety Data Sheet and container label for safe use, physical and health hazard information. This material should not be exposed to freezing conditions.