Vertasil® TM-L01 is a naturally derived and multifunctional hybrid fluid that offers improved solubility and sensory experience when compared to cyclosiloxanes.

### Vertasil® TM-L01 Applications

**Alternative to D₅ in These Products:**
- Tanning Oils
- Foundations
- Color Cosmetics
- Men’s Grooming Products
- Bath & Cleaning Products
- Creams and Lotions
- Hair Care Products
- Personal Hygiene Wipes
- Solid Sticks

### Vertasil® TM-L01 Benefits

- Non-Volatile, Environmentally Friendly
- Contains a Natural Component
- Improved Sensory Experience
- Reduces Tack & Greasiness
- Soft & Silky After Feel
- Improves Spreadability
- Fast Adsorption on Skin
- Light & Dry Skin Feel
- Cleansing Properties
- Non-Sensitizing

### Vertasil® TM-L01 Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>TM-L01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.426</td>
</tr>
<tr>
<td>Organic Compatibility</td>
<td>Yes</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>4-5</td>
</tr>
<tr>
<td>Volatility</td>
<td>Slight</td>
</tr>
<tr>
<td>Flash Point °C</td>
<td>&gt;65</td>
</tr>
<tr>
<td>Boiling Point °C</td>
<td>295</td>
</tr>
</tbody>
</table>

INCI Name: METHYL CYCLOHEXENYL ISOPROPYL TRISILOXANE - CAS: [1263044-00-3]/[126343-997]
SOLUBILITY
Vertasil® TM-L01 has improved solubility characteristics over cyclopentasiloxane, permitting greater compatibility with common raw materials including natural oils and waxes, hydrocarbons, esters, and sunscreens.

<table>
<thead>
<tr>
<th>Solubility</th>
<th>TM-L01</th>
<th>D₅</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogenated Polydecane</td>
<td>Soluble</td>
<td>Partial Soluble</td>
</tr>
<tr>
<td>Octyldodecyl Stearate</td>
<td>Soluble</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Triisostearyl Citrate</td>
<td>Soluble</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Natural Waxes</td>
<td>Soluble Hot</td>
<td>Partial Soluble</td>
</tr>
<tr>
<td>Lanolin Oil</td>
<td>Soluble</td>
<td>Soluble Hot</td>
</tr>
<tr>
<td>Octinoxate</td>
<td>Soluble</td>
<td>Insoluble</td>
</tr>
</tbody>
</table>

CLEANSING PROPERTIES
The gentle cleansing properties of Vertasil® TM-L01 are due to the insertion of limonene onto an emollient silicone. This combination offers the formulator an additional benefit in bath products, cleansing products, and wipes.

Cleansing Milk with Vertasil® TM-L01
Phase A
Deionized Water q.s.
Acrylate Copolymer 0.20
Actives q.s.
Propanediol 1.0

Phase B
Vertasil® TM-L01 10.0
Isopropyl Myristate 5.00
Polyglyceryl-3 Oleate 2.00
Polysorbate 80 0.50
Tocopherol 0.50

Phase C
Red 40 q.s.
Preservative q.s.
Fragrance 0.50

Volatility Comparison
- TM-L01
- Caprylyl Methicone

Compatibility Comparison
- Dimethicone (50 cSt) + mineral oil + TM-L01
- Dimethicone (50 cSt) + mineral oil
- Dimethicone (50 cSt) + C8 methicone

For list of distributors, please visit www.gelest.com/distribution/