Magnasoft 310 textile softener is a linear, amino-functional silicone polymer and an excellent candidate to consider for use as a textile softener. It contains reactive end-groups, allowing for chemical bonding with many surfaces or for molecule weight build-up, in the presence of moisture.

Magnasoft 310 textile softener can be easily emulsified to obtain stable micro emulsions that provide durable softness to virtually all types of fabrics.

Key Features and Typical Benefits

- can help impart outstanding softness to most types of fabrics
- excellent affinity to fabrics
- good stretch recovery of fabrics treated
- enhances the physical properties of fabrics
- potentially compatible with a wide range of chemicals used for textile finish
- easy to formulate

Potential Applications

- textile softener for most types of fabrics

**Typical Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Translucent, light yellow liquid</td>
</tr>
<tr>
<td>Specific Gravity, 25°C</td>
<td>0.98</td>
</tr>
<tr>
<td>Viscosity, (25°C) mPa•s (cP)</td>
<td>1,000 (1,000)</td>
</tr>
<tr>
<td>Refractive Index, (nD25)</td>
<td>1.408</td>
</tr>
<tr>
<td>Amino Content, wt%</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Typical property data values should not be used as specifications. Assistance and specifications are available by contacting Momentive sales office.

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**Solubility**

<table>
<thead>
<tr>
<th>Soluble</th>
<th>Toluene, Mineral sprits, Methyl ethyl ketone, Isopropanol, Dimethyl silicone fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insoluble</td>
<td>Methyl cellosolve, Water, Liquid paraffin</td>
</tr>
</tbody>
</table>

**Emulsification Instruction**

**Sample Formulation**(a)

<table>
<thead>
<tr>
<th>15 parts</th>
<th>Magnasoft 310 textile softener</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75 parts</td>
<td>TDE-5 (Polyethylene Glycol Tridecyl Ether, 5EO)</td>
</tr>
<tr>
<td>7.5 parts</td>
<td>TDE-10 (Polyethylene Glycol Tridecyl Ether, 10EO)</td>
</tr>
<tr>
<td>2.8 parts</td>
<td>Butyl Carbitol</td>
</tr>
<tr>
<td>0.5 parts</td>
<td>Hydrochloric Acid (HCl)</td>
</tr>
<tr>
<td>72.4 parts</td>
<td>Water</td>
</tr>
<tr>
<td>0.05 parts</td>
<td>Biocide(b)</td>
</tr>
</tbody>
</table>

(a) Product formulations are included as illustrative examples only. Momentive makes no representation or warranty of any kind with respect to such formulations, including, without limitation, concerning the efficacy or safety of any product manufactured using such formulations.

(b) Biocides must be used in accordance with local country regulations and manufacturer's label directions.

**Guide Procedure to Emulsify**

1) Separately pre-mix water and hydrochloric acid to prepare an acidic solution.
2) Charge Magnasoft 310 textile softener, TDE-5, TDE-10 and Butyl Carbitol into a mixer. Stir at 400~500rpm for 5 minutes.
3) Slowly charge 1/3 of the acidic water (= pre-mixed water with hydrochloric acid) and then stir at 400~500rpm for 10 minutes.
4) Slowly charge another 1/3 of the acidic water and then stir at 400~500rpm for 5 minutes.
5) Slowly charge the remaining 1/3 of the acid water and then stir at 400~500rpm for 5 minutes.
6) Continue to stir for 10 minutes.
7) Charge the biocide (if required) and continue to stir at 300~400rpm for 5 minutes.
8) A clear emulsion should be obtained.
Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.momentive.com or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials products may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC) and CareChem24 International also maintain an around-the-clock emergency service for all chemical products:

<table>
<thead>
<tr>
<th>Location</th>
<th>Momentive Performance Materials Products</th>
<th>All Chemical Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainland U.S., Puerto Rico</td>
<td>518.233.2500</td>
<td>CHEMTREC: 800.424.9300</td>
</tr>
<tr>
<td>Alaska, Hawaii</td>
<td>518.233.2500</td>
<td>CHEMTREC: 800.424.9300</td>
</tr>
<tr>
<td>Canada</td>
<td>518.233.2500</td>
<td>CHEMTREC: 800.424.9300</td>
</tr>
<tr>
<td>Europe</td>
<td>+518.233.2500 (Albanian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbo-Croatian, Slovak, Spanish, Swedish, Turkish, Ukrainian)</td>
<td>+44.(0)208.762.8322 (UK)</td>
</tr>
<tr>
<td>Middle East, All countries, except Israel</td>
<td>+518.233.2500</td>
<td>+961.3.487.287 (Lebanon)</td>
</tr>
<tr>
<td>Middle East, Israel</td>
<td>518.233.2500</td>
<td>+44.(0)208.762.8322 (UK)</td>
</tr>
<tr>
<td>Latin America, Asia/Pacific, all other locations worldwide</td>
<td>+518.233.2500</td>
<td>CHEMTREC: +1-703.527.3887 (collect)</td>
</tr>
<tr>
<td>At sea</td>
<td>Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.</td>
<td></td>
</tr>
</tbody>
</table>

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

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T +0120.975.400 or T +81.276.20.6182
• Korea  T +82.2.6201.4601
T +82.2.6201.4601
• Malaysia  T +60.3.9206.1532
T +60.3.9206.1532
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