WETSOFT® NE 810
Functional Silicone Fluids

WETSOFT® NE 810 is a self-dispersible polyether-amino-functional silicone fluid.

Properties

By improving hand and because of its hydrophilic nature, WETSOFT® NE 810 considerably improves the wear comfort of textiles and is therefore particularly suitable for use with nonwovens and terry goods. The hydrophilic properties are the result of the special orientation of WETSOFT® NE 810 on the fiber surface. This allows unrestricted moisture transport within the fabric, together with the excellent hand that is generally associated with high-quality silicone fabric softeners. WETSOFT® NE 810 bonds more strongly to the fiber surface than glycol- and quat-functional polysiloxanes. This leads to better exhaustibility and wash resistance. Formulations based on WETSOFT® NE 810 have a pH-stability that extends well into the alkaline range, and offer good shear resistance. Because of its cationic structure, WETSOFT® NE 810 has limited compatibility with anionic auxiliaries such as optical brighteners. Compatibility tests should be carried out before it is used together with other chemicals. WETSOFT® NE 810 can be used for hydrophilic treatment of fibers and textiles in diluted form, either on its own or mixed with WETSOFT® NE 820. WETSOFT® NE 810 is an ideal active substance in hydrophilic fabric softeners for treating fibers and textiles of all kinds. On hydrophilic substrates such as cellulosics, the hydrophilic properties are not usually affected, whereas hydrophobic substrates such as polyesters usually experience a clear improvement in wetting properties. A formulation based on WETSOFT® NE 810 and WETSOFT® NE 820 can impart spontaneous wettability to even very hydrophobic substrates.

WETSOFT® NE 810 provides woven goods and knitwear with a silklike soft, full bodied, supple and smooth hand.

When applied under normal conditions as part of a fabric softener formulation, WETSOFT® NE 810 has no effect on whiteness. It does not generally affect the color shade or fastness of colored goods.
Special features

• Concentrate
• Dilutable with water
• Easy to use

Technical data

General Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amine number</td>
<td>-</td>
<td>approx. 0.25 ml 1 N HCl/g</td>
<td>-</td>
</tr>
<tr>
<td>Appearance</td>
<td>-</td>
<td>clear to slightly turbid</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>yellowish liquid</td>
<td></td>
</tr>
<tr>
<td>Solid content</td>
<td>-</td>
<td>approx. 80 %</td>
<td>-</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>25 °C</td>
<td>2000 - 7000 mPa·s</td>
<td>DIN 53019</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product’s fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties’ rights.

Applications

• Textile Finishing
• Softeners & Hydrophilic Softeners
• Textiles & Leather
• Textile & Leather

Application details

WETSOFT® NE 810 formulations are used for padding, in the exhaust process and can also be used on their own or together with organic fabric softeners, polyethylene waxes and other finishing agents. The compatibility should be tested on a case-by-case basis.

Processing:
For padding, it is recommended to use 10 to 30 g/l (25%) WETSOFT® NE 810 formulation. For the exhaust process, 0.3 to 0.8% WETSOFT® NE 810 is used, based on the weight of the textile. WETSOFT® NE 810 can easily be diluted with warm water to produce stable formulations.

Typical formulation

50.0 parts demineralized water (40 °C)
4.0 parts i-tridecyl-O-(EtO)10-H (HLB 14)
10.0 - 25.0 parts WETSOFT® NE 810
35.9 - 20.9 parts demineralized water
0.1 parts preservative

The emulsifier is dissolved in the warm (40 °C) demineralized water, then gradually add WETSOFT® NE 810 and mix until the product is clear and homogenous. Finally the second amount of water and preservative agent are added.

Packaging and storage

Packaging

• 0.9kg Bottle
• 25kg Can
• 200kg Drum
• 950kg IBC

Storage

The ‘Best use before end’ date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code WETSOFT® NE 810

For technical, quality or product safety questions, please contact:

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