POWERSOFT® CF 20
Silicone Fluid Emulsions, functional

POWERSOFT® CF 20 is a 20% total solids, self-crosslinking, amino functional, elastomeric micro emulsion.

Properties

POWERSOFT® CF 20 imparts an excellent soft hand on cotton and polycotton substrates. POWERSOFT® CF 20 is medium yellowing and imparts elastomeric properties to fabrics and knit ware. Stretch recovery is greatly improved. Because of the crosslinking nature of the product durability is much better than standard amino softeners.

Technical data

General Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH value (emulsion 5% in water)</td>
<td>-</td>
<td>3.5 - 4.0</td>
<td>WSTM 3008</td>
</tr>
<tr>
<td>Appearance</td>
<td>-</td>
<td>Translucent to opaque emulsion with blue cast</td>
<td>WSTM 3043</td>
</tr>
<tr>
<td>Active content</td>
<td>-</td>
<td>approx. 14 %</td>
<td>-</td>
</tr>
<tr>
<td>Solid content</td>
<td>-</td>
<td>approx. 20 %</td>
<td>WSTM 3364</td>
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</tbody>
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These figures are only intended as a guide and should not be used in preparing specifications.
Application details

POWERSOFT® CF 20 is particularly suitable as a softener for the impregnation of fibers and textiles. POWERSOFT® CF 20 imparts a very soft, smooth and elastic hand to woven and knitted fabrics. It improves the wash-and-wear properties and the crease recovery angle, sewability and tear strength and reduces abrasion loss. The effects are fast to washing and dry cleaning.

POWERSOFT® CF 20 has little effect on the degree of white when usual application conditions are adhered to. As a rule, no adverse effect on the shade or color fastness properties of colored goods is observed.

Processing

POWERSOFT® CF 20 gives permanent effects without the addition of a catalyst. Provided no resins are used, specific curing conditions need not be adhered to.

POWERSOFT® CF 20 can be applied by padding but not by exhaust method in a jet dyeing machine. As with all products containing silicone, the finishing liquors should not be subjected to high shear, as this might cause instability. High loadings in wet-on-wet applications can cause pad roll build up. Special care should be taken to make sure rolls are cleaned periodically.

200-300 g/l of POWERSOFT® CF 20 are recommended for the pad method to achieve the elastic effect. Less can be used if only softening is needed. The pH of the liquor should not exceed pH 6. It may need to be adjusted with acetic acid.

POWERSOFT® CF 20 can be applied both alone or together with resins and other finishing agents. If POWERSOFT® CF 20 is used together with cross-linking agents and other additives, it should be added, in dilute form, after all the other products. (This applies generally to the processing of all polysiloxanes).

Higher crease recovery angles and lower abrasion values can be obtained in resin finishing by using POWERSOFT® CF 20.

Typical Formulation

50-300 g/l POWERSOFT® CF 20
Pad, liquor pick-up about 75%
Dry at 120-150°C

Packaging and storage

Storage

The “Best use before end date” of each batch is shown on the Certificate of Analysis. Storage beyond the date specified on the Certificate of Analysis 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

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet.
For technical, quality or product safety questions, please contact:

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
info@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.