KAPPAVON 209
Levelling and antifrosting agent

CHEMICAL-PHYSICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Chemical composition:</td>
<td>preparation of fatty alcohol ethoxylates and alkyl sulphonates</td>
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<tr>
<td>Appearance:</td>
<td>clear, viscous, nearly colourless liquid</td>
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<tr>
<td>pH-value 20 °C (product):</td>
<td>9 - 10</td>
</tr>
<tr>
<td>Density 20 °C (g/ml):</td>
<td>approx. 1.0</td>
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<tr>
<td>Ionic charge:</td>
<td>nonionic/anionic</td>
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FUNCTION

KAPPAVON 209 is especially suitable for the continuous dyeing and printing of carpet materials, like e. g. polyamide carpets and carpet yarns, needle felts or tufted materials due to the following properties.

KAPPAVON 209 has a sufficient wetting property. If the fabrics are poorly wettable, we recommend to increase the wetting power by adding 1 – 2 g/l of the nonionic wetting agent KAPPAWET BOS.

The product develops a resistant foam in form of fine bubbles, preventing the formation of frost on the fabric to be dyed.

During the dyeing process, KAPPAVON 209 controls the velocity by reducing temporarily the pick-up of the dyestuffs onto the fibres. Thus a good dye penetration of the pile of tufted materials and an absolute evenness of the dyeing is possible. If the pH-value of the liquor is correctly adjusted by KAPPAVON 209, the pick-up of the dyestuffs is not reduced.

KAPPAVON 209 contains biodegradable components.

KAPPAVON 209 is resistant to water hardness, acids, alkali, metal salts and other electrolytes.

APPLICATION

3 – 6 g/l KAPPAVON 209 are added to the liquors adjusted with the adequate thickening.

If fabrics are not pre-wetted before dyeing, the liquor application level should be 400 – 600 % of the product weight. Generally, a liquor application of approx. 300 % is sufficient for pre-wetted material.

For pre-wetting we also recommend the wetting agent KAPPAWET BOS. Apart from wetting properties the product also emulsifies and eliminates anti-foaming preparations from the basic fabric or nonwoven as well as from the contact surface.

Recommended application level:

1 – 2 g/l KAPPAWET BOS

Regarding the application of the additionally mentioned products, please note the corresponding technical data sheets.

DILUTION INSTRUCTION

KAPPAVON 209 is can be diluted with warm water at any ratio.

STORAGE

KAPPAVON 209 remains stable for at least 1 year if stored properly and cool in a tightly closed container.