KAPPAZYM C 94 NEW
Liquid cellulase preparation for enzymatic finishing (bio-polishing)

CHEMICAL-PHYSICAL DATA
Chemical composition: aqueous enzyme preparation based on cellulase
Appearance: clear, dark-brown liquid
pH-value 20 °C (product): approx. 5.2
Density 20 °C (g/ml): approx. 1.03

FUNCTION
KAPPAZYM C 94 NEW is used for the enzymatic finishing of cellulosic fibres, the “bio-polishing” process. It has a specific effect on cellulosic fibres and is completely biodegradable. It changes the surface of woven and knitted fabrics by controlled hydrolysis (de-composition) of cellulosic fibres.

Bio-polishing with KAPPAZYM C 94 NEW
- prevents or removes pilling, slubs, knots.
- creates a glossy, smooth surface.
- gives a soft, smooth handle.
- prevents interlocking of fibre ends and thus a conglutination of the fabric.
- creates stone-wash effects on ready-made jeans.

To achieve optimal effects the following conditions need to be observed:
- Temperature: between 40 – 55 °C
- pH-value: optimal activity and stability pH 4.2 – 6.2

APPLICATION
KAPPAZYM C 94 NEW can be used in the continuous as well as in the discontinuous process for the surface modification of woven and knitted fabrics made of cellulosic fibres.
KAPPAZYM C 94 NEW can be applied on its own or integrated in the after-soaping or conditioning process.

Discontinuous process (winch, jet, paddle, drum)

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<thead>
<tr>
<th>0.5 – 3.0 %</th>
<th>KAPPAZYM C 94 NEW</th>
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<tbody>
<tr>
<td>liquor ratio:</td>
<td>5:1 to 25:1</td>
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<tr>
<td>treatment time:</td>
<td>30 – 60 minutes (depending on required effect)</td>
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<tr>
<td>temperature:</td>
<td>45 – 55 °C</td>
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<tr>
<td>pH-value:</td>
<td>4.2 – 6.2 adjust with acetic acid</td>
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After the treatment, the enzymatic decomposition process must be terminated (enzyme stop, deactivated) either by a temperature increase to 70 °C and dwelling for 20 minutes at 70 °C (rinse hot and cold afterwards) or by rinsing hot and cold and immediate drying of the fabric at 120 °C minimum in order to prevent further decomposition of the cellulose and thus material damage.
Any overdose or prolonged treatment with KAPPAZYM C 94 NEW should therefore be avoided.

DILUTION INSTRUCTION
KAPPAZYM C 94 NEW can be diluted with cold water at any ratio. The product can also be added directly to the liquor.

STORAGE
At a storage temperature of 25 °C, KAPPAZYM C 94 NEW generally maintains its declared activity for at least 3 months. Longer storage above 30 °C should be avoided.