KAPPAZYM NT 120
Highly concentrated, enzymatic desizing agent for low temperature range of 30 – 50 °C

CHEMICAL-PHYSICAL DATA
Chemical composition: bacteria amylase
Appearance: yellow to brown liquid
pH-value 20 °C (product): approx. 6.5
Density 20 °C (g/ml): approx. 1.2
Ionic charge: nonionic

FUNCTION
The effect of KAPPAZYM NT 120 depends to a great extend on the following parameters:

Temperature: optimal activity 30 – 50 °C
pH-value: optimal activity and stability at pH 6 – 8, if possible 6.5 – 7.5
Stabilizers: salts causing hardness of water, 2 – 4 g/l sodium chloride
Wetting agent: Nonionic wetting agents, whit a cloud point above the desizing temperature, are suitable. Most anionic products are not suitable.
Heavy metal ions: are effective as enzyme toxicants and need to be sequestered

APPLICATION
Production of the desizing liquor:
Prepare water and heat up to 40 °C. In case of soft water, dissolve calcium salts and stir in. Dissolve sodium chloride and stir in. Dissolve wetting agent and stir in. Check pH-value and adjust with soda or acetic acid, if necessary.

If the desizing liquor is stored for some hours, this should be done at room-temperature.

Recommended application levels

<table>
<thead>
<tr>
<th>Process</th>
<th>Concentration</th>
<th>Treatment Time</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winch</td>
<td>0.25 – 1.0 ml/l</td>
<td>30 – 60 minutes</td>
<td>40 °C</td>
</tr>
<tr>
<td>Jig</td>
<td>1.0 – 2.0 ml/l</td>
<td>approx. 4 ends</td>
<td>40 °C</td>
</tr>
<tr>
<td>Pad roll</td>
<td>2.0 – 3.0 ml/l</td>
<td>120 – 240 minutes or over night</td>
<td>40 °C or cold over night</td>
</tr>
</tbody>
</table>

Rinse thoroughly after desizing to remove decomposition products.

DILUTION INSTRUCTION
KAPPAZYM NT 120 can be diluted with cold water at any ratio. The product can also be added directly to the liquor.

STORAGE
KAPPAZYM NT 120 generally maintains its declared activity for at least 3 months if stored properly and at a temperature of 25 °C in a tightly closed container. Longer storage above 30 °C, should be avoided.