KAPPAZYM AP
Enzymatic destruction of residual peroxide

CHEMICAL-PHYSICAL DATA
Chemical composition: catalase
Appearance: yellow to light brown liquid
pH-value 20 °C (product): 5.5 – 6.5
Density 20 °C (g/ml): approx. 1.0
Ionic charge: nonionic

FUNCTION
KAPPAZYM AP is used for the enzymatic (bio-catalytic) destruction of residual peroxide during the pre-bleaching of cellulosic fibres and their blends with other fibres. Residual peroxide is decomposed by KAPPAZYM AP into non-active oxygen and water. The enzyme has no influence on the fibre or dyestuffs and therefore enables dyeing in the same bath without prior rinsing. This specific deactivation of the residual peroxide without the formation of sulphate or nitrate salts represents an environmentally friendly process.

Temperature: between 30 – 70 °C
pH-value: optimum activity and stability pH 5.5 – 6.5
Stabilizers and wetting agents: compatible with most of the interfacial active substances and hydrogen peroxide stabilizers

APPLICATION
Discontinuous pre-bleaching on jet, winch, apparatus, jig, etc.

<table>
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<tr>
<th>Description</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>0.5 ml/l KAPPAWET-type (wetting agent/detergent)</td>
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<tr>
<td>0.5 ml/l KAPPAQUEST P 73 (stabilizer/sequestering agent)</td>
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<td>2.0 ml/l NaOH 38 °Bé</td>
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<tr>
<td>1.0 – 2.0 ml/l H₂O₂ 35 % (jig 3 – 4 ml/l)</td>
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For dyeing the treatment is as follows:
Drain the bleaching liquor and rinse max. 1 time. Fill with fresh, cold water, neutralize if necessary (pH 4 – 8).
Add

0.2 – 0.5 % KAPPAZYM AP

10 – 15 minutes treatment at 30 – 60 °C (residual H₂O₂-test with peroxide indicators or KMnO₄). Dye in the same bath without rinsing.

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

DILUTION INSTRUCTION
KAPPAZYM AP is added to the liquor undiluted.

STORAGE
KAPPAZYM AP generally maintains its declared activity for at least 6 months if stored at a temperature of 25 °C in tightly closed containers. Longer storage at temperatures above 30 °C should be avoided.