KAPPASPERSE BPE
Wetting, scouring and dispersing agent

CHEMICAL-PHYSICAL DATA
Chemical composition: formulation based on ethoxylates and mixed polymers
Appearance: colourless, cloudy, pasty liquid
pH-value 20 °C (product): 7 – 8.5
Density 20 °C (g/ml): approx. 1.0
Ionic charge: nonionic

FUNCTION
KAPPASPERSE BPE is preferentially used as low-foaming wetting, scouring and dispersing agent for the contrast enhancement in the jeans treatment.
KAPPASPERSE BPE
- reduces soiling of the white cotton weft and the pocket lining of blue jeans in any stage of the washing process.
- has good wetting, scouring and dispersing properties, independent of the temperature of the treatment baths.
- is compatible with enzyme preparations based on amylases and cellulases.
- is low-foaming, and can therefore be applied on drum washing machines.
- is easy to dose.

APPLICATION
During jeans washing processes KAPPASPERSE BPE prevents soiling of undyed fibres (weft, pocket lining and labels) in jeans clothing by removed Indigo.
The product is suitable for all jeans treatment processes such as desizing, pre-scouring, stonewash, bleaching and post-scouring.
Furthermore, KAPPASPERSE BPE improves the rub fastness and reduces the soiling of additional fabrics like pocket lining, also when washing sulphur and pigment dyed fabrics.
Recommended formulation on the drum washing machine:

Desizing

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 g/l</td>
<td>KAPPAZYM DZ 88</td>
</tr>
<tr>
<td>1 g/l</td>
<td>KAPPASPERSE BPE</td>
</tr>
</tbody>
</table>

Liquor ratio: 8:1 – 12:1
Treatment time: 10 – 15 minutes
Temperature: 60 °C
Then rinsing.

Stonewash

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 – 1 %</td>
<td>KAPPACELL PWR 20</td>
</tr>
<tr>
<td>1 – 2 g/l</td>
<td>KAPPASPERSE BPE</td>
</tr>
</tbody>
</table>

Liquor ratio: 4:1 – 8:1
Treatment time: 20 – 45 minutes
Temperature: 40 – 55 °C (depending on type of cellulase)
Then rinsing and post-scouring.
Post-scouring of stonewashed jeans denim

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 g/l</td>
<td>KAPPASPERSE BPE</td>
</tr>
<tr>
<td>0.5 – 2 g/l</td>
<td>alkali (soda, caustic soda)</td>
</tr>
<tr>
<td>0 – 2 g/l</td>
<td>hydrogen peroxide 35 %</td>
</tr>
<tr>
<td>x %</td>
<td>optical brightener, if necessary</td>
</tr>
</tbody>
</table>

Liquor ratio: 8:1 – 12:1
Treatment time: 10 – 15 minutes
Temperature: 40 – 60 °C

Then rinsing.

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

DILUTION INSTRUCTION

KAPPASPERSE BPE can be diluted in cold or warm water and can therefore also be added undiluted during the wash-cycle.

STORAGE

KAPPASPERSE BPE remains stable for at least 6 months if stored properly in a tightly closed container.
Do not expose to frost!
After thoroughly stirring frozen product is usable again.