KAPPAJEANS AO

Softener against yellowing of blue denim

CHEMICAL-PHYSICAL DATA

Chemical composition: specific, fatty acid condensation product
Appearance: beige emulsion
pH-value 20 °C (product): 3.0 – 6.0
Ionic charge: nonionic

FUNCTION

KAPPAJEANS AO reduces yellowing tendency of blue denim dyed with Indigo.
KAPPAJEANS AO
- has a very soft, smooth handle.
- is suitable for drum washing machines, as it is easy to dose.
- protects against yellowing.
- has no negative effect on other fastnesses such e. g. as rubbing fastness.
- is low-foaming.

Yellowing and fading of blue denim dyed with Indigo during storage is a causal problem of the Indigo dyestuff. It is caused particularly by the influence of nitric oxide and ozone. Thereby yellowish decomposition products are formed, which can normally be removed by washing. However, lighter colour areas are left.

Corrosive gas concentration
This is highest in cities, on busy roads and in industrial estates as well as in warehouses, where fork lift trucks with combustion engines are used. High humidity considerably increases the yellowing tendency.

Air circulation in the fabric
This should be low, i. e. the ventilation in the storehouse should be low. It is best to store the product in airtight, special packing.

Sensitivity of the goods
Most sensitive are light dyes, which only contain few Indigo, also bleached and superbleached articles as well as particularly stretch denim. Light products are saturated much quicker by damaging gases, therefore they are more sensitive than heavy qualities.

When using KAPPAJEANS AO the yellowing tendency during storage can be delayed considerably, whereas the protection increases in-line to the application level.

KAPPAJEANS AO places around the Indigo dye molecule and therefore keeps away damaging gases.

However, the following preconditions are important for full effectiveness:
- Optimum after-washing and removal of chlorine, tenside and enzyme remainders.
- No remainders of removed Indigo on the product, particularly on white weft.
- Good drying of the product.

APPLICATION

When applying on the drum washing machine, the dosage in the last treatment bath is as follows:

<table>
<thead>
<tr>
<th>2 – 5 % ofw</th>
<th>KAPPAJEANS AO</th>
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</thead>
<tbody>
<tr>
<td>liquor ratio:</td>
<td>6:1 – 12:1</td>
</tr>
<tr>
<td>treatment time:</td>
<td>10 – 15 minutes</td>
</tr>
<tr>
<td>temperature:</td>
<td>25 – 40 °C</td>
</tr>
<tr>
<td>pH-value:</td>
<td>5 – 6, adjust with acetic or citric acid</td>
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</tbody>
</table>
Afterwards in the same bath

| 1 – 2 g/l | sodium bicarbonate or soda (pre-diluted) |

To be added for neutralisation of the liquor pH-value to 6.5 – 7.5. Treatment time: 5 minutes. Afterwards the product is dehydrated without rinsing and dried in the tumbler. The pH-value of the product then should be neutral.

Do not use any additional softeners, as the effectiveness of KAPPAJEANS AO can be considerably affected. This is particularly applied to products based on silicone.

**DILUTION INSTRUCTION**

KAPPAJEANS AO can be diluted with cold water, but is normally added directly to the liquor.

**STORAGE**

KAPPAJEANS AO remains stable for at least 6 months if stored properly in a tightly closed container. Do not expose to frost!