

AVCO-SON DNL-01

NEUTRAL CELLULASE FOR FOR BIO-POLISHING

AVCO-SON DNL-01 is a liquid neutral cellulase enzyme preparation, which is recommended for the bio-polishing of cellulosic fabrics at the neutral pH range. AVCO-SON DNL-01 is producing a controlled hydrolysis of fine cellulose fibres protruding from the fabric surface. The result is a softer fabric with a smooth appearance and reduced pilling problems during subsequent washing processes. AVCO-SON DNL-01 is a neutral cellulase, and is superior to acidic cellulase preparations with respect of the possibility of applying the bio-polishing before and also after the dyeing process. The AVCO-SON DNL-01 is active at a broad pH range of 5 – 8. For cost saving it is possible to apply the bio-polishing process in one step together with other processes such as enzymatic peroxide elimination and enzymatic bio-scouring.

SPECIFICATIONS:

Appearance	Clear, light brown liquid.
Chemical nature	Aqueous cellulase enzyme preparation
Solubility	Soluble in water at any ratio.
pH (0.1% sol.)	4.5 – 4.9
Compatibility	Can be used at a pH range of 5 to 8
Storage	Keep in cool and dry place in tightly closed packages. When properly stored shelf life is at least 12 months.

PROPERTIES & USES:

1. AVCO-SON DNL-01 is a neutral cellulase enzyme preparation, designed for the anti-pilling finish of cellulosic fabrics, producing a smoother and softer fabrics with less pilling after repeated laundries.
2. AVCO-SON DNL-01 is effective in a broad pH range of 5 - 8 compared to conventional acid cellulase preparations. There is no need to adjust the pH of the treatment bath to an acid pH, and there is no need to re-adjust it after the treatment.
3. AVCO-SON DNL-01 is effective in a wide temperature range of 45-65° C.
4. Bio-polishing with AVCO-SON DNL-01 ensures good colour retention and less back staining.
5. AVCO-SON DNL-01 can be used together with other enzymatic processes such as desizing, bio-scouring, peroxide elimination.
6. Using AVCO-SON DNL-01 ensures higher tensile strength and less weight loss compare to conventional acid cellulases.

Technical – Information

7. AVCO-SON DNL-01 is a free flowing liquid which can be metered very easily to the machine.

APPLICATION:

1. The bio-polishing process with AVCO-SON DNL-01 should be applied before or after the dyeing process.
2. For optimum results, the process should be done in a dyeing machine with high turbulence such as jet, winch and drum garments dyeing machines.

BIO-POLISHING TREATMENT

1. Load the machine with the cellulosic fabrics. Liquor ratio should be 1:6-1:10.
Add if required nonionic wetting agent and an anti-crease agent.
2. Warm up to 45-65°C (optimum is at 50-60°C).
3. Check pH, should be 5- 8 (optimum is at 5.5 – 6.5).
4. Add 0.5 - 2 % o.w.g. of AVCO-SON DNL-01.
5. Run for 30 - 40 minutes.
6. Stop the activity of AVCO-SON DNL-01 by raising the temperature to 80°C.
Run for 10 minutes and drop bath.
7. Rinse well and neutralize.

REMARKS:

1. Mechanical abrasion is needed.
2. Use a filter system in jets to collect the loose fibres.