

Technical - Information

AVCO-LEV VAT

NON-RETARDING LEVELLING AGENT FOR VAT DYES

AVCO-LEV VAT is an anionic levelling agent with dispersing properties, for dyeing vat dyes in high liquor ratio dyeing machines and in continuous vat dyeing processes. The product is non-retarding and is not lowering the colour yield.

SPECIFICATION:

Appearance	Slightly yellowish, clear liquid.
Chemical nature	Blend of surfactants in aqueous solution.
Compatibility with: Anionic compounds, cationic compounds, nonionic compounds	} Compatible.
Ionicity	Nonionic.
pH (10% sol.)	7.5 ± 1
Resistance to: Acids, Alkalis, Electrolytes, Water-hardness	Good under the conditions normally encountered in dyeing of vat dyes.
Solubility	Miscible with water in any ratio.
Storage	Freezes at 0°C. Fully usable after thawing. Shelf life is at least 12 months.

PROPERTIES & USES:

1. AVCO-LEV VAT improves the levelling properties of vat dyes. Warp stripes and affinity differences between cottons of different origins are largely or completely covered.
2. In the case of dense woven fabrics, excellent dye penetration is achieved with AVCO-LEV VAT. In particularly difficult cases, the effect can be assisted by raising the temperature to 70 - 80°C and somewhat prolonging the dyeing time.
3. Because it has no stripping action, AVCO-LEV VAT permits faulty dyeing to be levelled with only a very small addition of dye to the blind vat.
4. AVCO-LEV VAT performs well not only in exhaust dyeing but also in pad-steam dyeing. Addition of this product to the Caustic-Soda/Hydrosulfite reducing liquor accelerates dye vatting in the steamer, and so ensures complete vatting and fixation even with relatively short steaming times.
5. Experience has also shown that AVCO-LEV VAT has a stabilizing effect on shade consistency during the steaming phase. It largely prevents shade changes due to temperature variations in the steamer or to the use of excessive or insufficient amounts of reducing agent.

Technical - Information

APPLICATION:

In general, the following application levels are recommended for dyeing cotton:

1. High liquor ratio dyeing machines:

Liquor ratio	Use of AVCO-LEV VAT
20:1	1 - 4 g/l
10:1	2 - 8 g/l
5:1	4 - 12 g/l

2. Continuous dyeing processes:

Add 5 - 15 g/l AVCO-LEV VAT to the vat dyes padding solution.

- 3.** For levelling faulty dyeings which have been oxidized and soaped, these amounts should be increased by about 50% and the temperature of the blind vat can be raised if necessary to 70 - 80°C.