



DYEING

LEVEGAL® RL

Extreme levelness in reactive dyeing

LEVEGAL® RL

Often 'spots' occur in dyeing with reactive dyes in exhaust and pad batch dyeing. Standard dispersing agents based on acrylates or phosphonates are used to prevent dyestuff agglomeration. TANATEX offers a product that increases the solubility of the reactive dyes and achieves a tremendous decrease of spots and leveling problems: LEVEGAL® RL.

Four different variables influence the dyeing in general: salt, water quality, cotton pre-treatment and dyestuff quality. In general a dyer uses products in the dyebath that are acrylate or phosphonate based dispersing agents, which do not de-metalize the dyestuff.

The metal ions interact with anionic solubilizing groups of dyes. This lower activity of the SO_3^- groups results in agglomeration and sedimentation of dyes. To prevent this we use dispersing agents.

However these calcium and magnesium dispersing agents only have a secondary positive effect in the dye solubility. The dispersing agent works by liberating the anionic solubilizing groups, from the cationic hardness that blocks the solubilizing groups.

How LEVEGAL® RL works

- ✖ increases solubility of the dyes;
- ✖ decreases the negative effect of salt and hardness on the solubility of dyes without interfering with the yield and the affinity of the dyes to the cotton.

LEVEGAL® RL: EXTREME LEVELNESS

LEVEGAL® RL improves the solubility of reactive dyes under dyeing conditions.



Left picture elucidates the agglomerations in the liquor, which means insufficient solubility.

Right picture shown no agglomerations. This demonstrates the positive influence of LEVEGAL® RL on the solubility.

0.1 g/l Turquoise reactive dye

100 g/l salt

80°C 15 minutes

Benefits of LEVEGAL® RL

- ✖ Improves the stability of reactive dyes in solution when dyeing cellulosics and PES/CEL blends;
- ✖ Improves dye diffusion and thus levelness;
- ✖ Dissolves and disperses impurities in the fiber;
- ✖ Stable to substances causing water hardness;
- ✖ Low-foaming;
- ✖ No tailing and decrease in spots in continuous dyeing.