

## TECHNICAL TUESDAYS

TOPIC: Reduction Clearing Process for Polyester

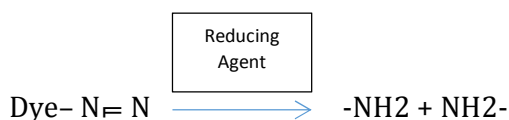
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### What is the Reduction Clearing Process?

The Reduction Clearing Process is an essential process in removing unfixed dyes after the dyeing of polyester. If unfixed dyes are not removed, wash fastness and rub fastness of the dyed fabric is negatively affected.

### Mechanism of Reduction Clearing Process:

The chromophores of dyes, generally the  $-N=N-$  group, gets reduced to the amino groups as provided below:



This reduced form of dyes is colorless and has no affinity toward fibres.

### Reduction Clearing Process using Hydroses & Caustic:

Generally Caustic & Hydroses are used in the Reduction Clearing Process to remove unfixed dyes.

**Application Conditions:** Hydroses-2% + Caustic-2% ,Run for 20-30 Mins @ 80°C Followed by hot wash & neutralization.

Number of Reduction Clearings can be decided based on the shade.

### Advantages of Reduction Clearing:

To improve rubbing & wash fastness

**An alternative to the conventional Caustic & Hydroses Reduction Clearing Process is the Acid Reduction Clearing Process.**

Wishing you a great week ahead!

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[arc@resil.com](mailto:arc@resil.com) | [www.resil.com](http://www.resil.com)