

## Colour fastness properties of tie-dyed cotton fabric with hot reactive dye

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■ **ABSTRACT** : Colour fastness of fabric is very important aspect as end use of fabrics depends on this property. A study was conducted to investigate the colour fastness properties of tie-dyed cotton fabric using reactive dye. The tie-dyed samples were evaluated for colour fastness to washing, rubbing, light and perspiration using the methods prescribed by the Bureau of Indian Standards. The fabric was dyed with reactive dye in two dye concentrations *i.e.*, 2 per cent and 4 per cent. In 2 per cent dye concentration, the washing fastness was excellent whereas in 4 per cent it was very good. Sunlight fastness was good in both 2 per cent and 4 per cent dye concentrations. Acidic perspiration fastness was good in both the dye concentrations and alkaline perspiration fastness was very good in 2 per cent dye concentration and it was fairly good in 4 per cent dye concentration. Dry rubbing fastness was excellent in both dye concentrations *i.e.* 2 and 4 per cent of reactive dye and wet rubbing fastness was very good with both the dye concentrations. The results concluded that colour fastness of the samples dyed with lower percentage gave better fastness than higher percentage indicating that more dye ions hinders the absorption of dye by the fabric.

■ **KEY WORDS** : Reactive dye, Colour fastness, Dye concentration

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