

How to Dye Polyester/Cellulosic Blends with Disperse and Reactive Dyes using a Continuous/Thermosol Process

The steps involved in this continuous dye procedure for polyester/cellulosic blends are:

- Dye Bath Padding
- Drying
- Thermosoling(Disperse dye fixation)
- Reactive Dye Chemical Bath Padding
- Steaming(Reactive Dye Fixation)
- Washing

1. Pad goods, at 60% pick-up, at room temperature, through a dye pad-bath containing:

• Orcocilacron™ Disperse dyes*	X	oz/gal(g/L)
• Reactive I - Series™ Dyes*	Y	oz/gal(g/L)
• Orconol CHSA Conc™	2.7-5.3 (20-40)	oz/gal(g/L)
• Orco Antimigrant ALG™	5.3-10.6(40-60)	oz/gal(g/L)
• Urea	5.3-8(20-30)	oz/gal(g/L)
• Orcotol MN Powder™	1.33(10)	oz/gal(g/L)

*These dyes should be properly prepared. It is recommended that disperse dyes with high sublimation ratings are used in this procedure where high temperatures are attained such as in the thermosol step.

2. Dry at 225°F(107°C) for 2 minutes.

3. Thermosol at 300°-325°F(149-163°C) for 2-3 minutes.

4. Pad goods at 60% pick-up, at room temperature, through a chemical pad-bath containing:

Shade(oz/gal(g/L))	Caustic-50% Liq(oz/gal(g/L))	Soda Ash(oz/gal(g/L))	Salt(oz/gal(g/L))
up to 0.67(5.0)	1.1(8.0)	2.4(18.0)	2(15.0)
0.67-2.0(5.0-15.0)	1.3(10.0)	2.6(20.0)	2.6(20.0)
2.0-4.0(15.0- 30.0)	1.9(14.0)	3.7(28.0)	4.0(30.0)
4.0(30) +	2.6(20.0)	-	4.0(30.0)

5. Steam for 10 minutes for fixation of the reactive dye.

6. Rinse in three wash boxes at 140°F(60°C).

7. Soap at boil using **Orcopon KP™**.

8. Rinse in the remaining wash boxes warm then cold.