# How to Jet or Package Dye Polyester/Cellulosic Blends Using Disperse and Reactive Dyes

This is a general procedure for 50/50 Polyester/Cotton:

1. Prepare goods as necessary.
2. If the substrate being processed is rayon, do not exceed a pH of 9 as it will cause saponification of the fiber.
3. Enter goods into a bath at 140°F(60°C) containing 1-2% owf **Orcoterge 35-C™** and acetic acid 56% for a pH of 5 .
4. Run for 10 minutes then add pre-dispersed **Orcocilacron™** Disperse dyes properly prepared. It is recommended that high-energy disperse dyes are used in a procedure where temperatures attained are between 250-275°F(120-135°C).
5. Raise temperature slowly to 265°F(130°C) at a rate of 2°F/minute and run for 45 minutes.
6. Cool bath to 175°F(80°C).
7. Add the required amount of Glauber's salt as shown on chart below.
8. Slowly add the **Reactive I-Series™** dye solution properly prepared. It may be necessary to add the dye before the salt addition in order to maintain control of the exhaustion rate. In this case the salt should be added over a period of 20-30 minutes and then let run for 10-20 minutes.
9. Add soda ash as prescribed in chart below over a 10-minute period. Run for 45 minutes.
10. Sample and shade if necessary.
11. Apply two warm rinses at 140°F(60°C)
12. Neutralize with 0.5 % owg Acetic Acid.
13. Soap at the boil using 0.25 % owf **Orcopon KP™**.
14. Warm rinse then cold rinse.

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**Salt Additions:**

| % owf | oz/gal(g/L) Salt |
|---|---|
| to 0.50 | 5(40) |
| 0.51-1.00 | 7(50) |
| 1.01-2.00 | 9(70) |
| 2.01-4.00 | 12(90) |
| 4.01+ | 13(100) |

**Alkali Additions:**

| %owf dyes | Soda Ash oz/gal(g/L) | | Caustic 50% oz/gal(g/L) | |
|---|---|---|---|---|
| | 10:1 | 20:1 | 10:1 | 20:1 |
| to 0.75 | 0.8(6) | 0.8(6) | .20(1.5) | .20(1.5) |
| 0.75-2.00 | 0.8(6) | 0.8(6) | .20(1.5) | .20(1.5) |
| 2.01-4.00 | 1.06(8) | 1.06(8) | .265(2.0) | .27(2.0) |
| 4.01+ | 1.06(8) | 1.06(8) | .265(2.0) | .27(2.0) |

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