

How to Dye Polyester/Spandex Blends with Orcolan Neutral™ Acid Dyes using a Two-Bath Process

1. Prepare goods as necessary.
2. In any procedure involving Spandex®, the temperature should not exceed 200°F(93°C) as it may degrade the integrity of the fiber.
3. Enter goods into a bath at 120°F(49°C) containing:
 - 2 % owg Acetic Acid 56%
 - 2 % owg **Orcoterge 35-C™**
 - 6 % owg **Orco Dye Carrier LLR™**
4. Run for 10 minutes and add:
 - X % owg **Orcocilacron™** disperse dyes properly prepared.
5. Raise temperature to 195-200°F(90-93°C) being careful not to exceed 200°F, and run for 1 ½ hours.
6. Cool back to 120°F(49°C) and overflow rinse until clear.
7. Perform a reduction scour to remove unfixed disperse dye from the Spandex®
8. Enter the goods into a bath at 100°F(38°C) and add:
 - 0.30 oz/gal(2.25g/L) **Orcoterge ALK-N Conc™**
 - 0.40 oz/gal(3.00g/L) sodium carbonate
 - 0.50 oz/gal(3.75g/L) Sodium Hydrosulfite
9. Raise temperature to 180°F(82°C) and run for 20 minutes.
10. Overflow rinse until clear.
11. Add 0.16 oz/gal(1.2 g/L) of hydrogen peroxide 35% to a fresh bath at 120°F(49°C) and run for 15 minutes.
12. Overflow rinse until clear and drop bath.
13. Now dye the Spandex® portion of the fabric using **Orcolan Neutral™** premetallized dyes.
In a bath at 100°F(38°C) add:
 - 0.5 % owg **Orco Salt O Solution™**
 - 1.0 % owg **Orconol CHSA Conc™**
 - 1.0 % owg Ammonium Sulfate
14. Adjust pH to 9.0 with ammonium hydroxide and run for 10 minutes.
15. Add the properly prepared **Orcolan Neutral™** dyes.
16. Circulate for 10 minutes.
17. Slowly raise temperature to 190-195°F(88-90°C) and run for 1 ½-2 hours adding acetic acid to promote dye exhaustion if necessary.
18. Overflow rinse well and drop bath.