

## How to Garment Dye(All-In Method) Cotton Using Orco Reactive BF-Series™ Dyes

1. This procedure is designed for a liquor ratio of 10-15:1.
2. Garments should be properly prescoured and/or prebleached. If the substrate being processed is rayon, do not exceed a pH of 9 as it will cause saponification of the fiber.
3. Fill machine with water and set bath at 80°F(27°C) adding:

0.5%	<b>Orconol CHSA Conc™</b> on weight of goods (owg)
0.5% owg	Sodium Hexametaphosphate
1.0% owg	<b>Orcotol MN Powder™</b>

4. Add Common or Glauber's salt, **BF-Series™** reactive dye properly prepared, and soda ash as listed in the table below:

<u>% owg Dye</u>	<u>Salt in oz/gal(g/L)</u>	<u>Soda Ash in oz/gal(g/L)</u>
0-0.5	1.3-2.7 (10-20)	.67 (5)
0.5-1.0	2.7-4.0 (20-30)	1.33 (10)
1.0-3.0	4.0-6.7 (30-50)	1.33 (10)
>3.0	8.0-10.5 (60-80)	1.33 (10)

5. For turquoise shades use 2.7 oz/gal(20 g/L) of Soda Ash.
6. Load garments and run for 10 minutes at 80°F(27°C).
7. Heat to 140°F(60°C) at a rate of 2°F/minute and run for 30 minutes.
8. Sample and check for correct shade.
9. Drain bath and rinse in new bath at 140°F(60°C) for 5 minutes. Repeat.
10. In new bath at 100°F-120°F(38°C-50°C), neutralize with 1 g/L(0.133oz/gal) Acetic Acid 56%(or more if necessary for neutralization of residual alkali) for 15 minutes. Drop bath.
11. In a fresh bath at 140-180°F(60-82°C) and containing 1-2% owg **Orcopon KP™**, run goods for 20 minutes and drop bath.
12. Rinse at 140°F(60°C) for 10 minutes.
13. Rinse cold until clear.
14. Add fixative or softener if desired.