

## How to Exhaust-Dye Cotton Using Orco Reactive MX-Series™ Dyes

1. Prepare and prescour cotton goods. Goods should have good absorbency, wet-out, and contain no residual chlorine, peroxide, or alkali.

2. At 105°F(40°C) add:

1.0%	<b>Orconol CHSA Conc™</b> on weight of fabric(owf)
0.067 oz/gal(0.5g/L)	Sodium Hexametaphosphate,
1.0% owf	<b>Orcotol MN Powder™</b> (for closed machines such as jets), and
X% owf	<b>MX-Series™</b> dye properly prepared.

3. Run for 5-10 minutes.

4. Add common or Glauber's salt as prescribed in chart below. Run for 25 minutes. This should be added in thirds in 5-minute intervals when dyeing light shades to help promote dyeing levelness.

<u>% owf</u>	<u>oz/gal(g/L)</u>
to 0.50	5 (38)
0.51-1.00	7 (53)
1.01-2.00	9 (68)
2.01-4.00	12 (91)
4.01+	13 (98)

5. Add soda ash as prescribed in chart below. This should be added in thirds when dyeing light shades to help promote dyeing levelness. Run 45-60 minutes.

<u>% owf dyes</u>	<u>Soda Ash oz/gal(g/L)</u>		
	<u>15:1</u>	<u>20:1</u>	<u>30:1</u>
to 0.5	.67 (5)	.40 (3)	.27 (2)
0.51-2.0	.67 (5)	.53 (4)	.27 (2)
2.01-4.0	1.33 (10)	1.06 (8)	.53 (4)
4.01+	2.00 (15)	1.33 (10)	.66 (5)

6. After dyeing, overflow rinse until clear using cold water. Drop bath.

7. In new bath at 100°F(38°C) neutralize with 0.133 oz/gal(1g/L) of Acetic Acid 56% or more if necessary for neutralization of residual alkali for 10 minutes. Drop bath.

8. Soap at boil using 0.25% owf **Orcopon KP™** for 10-15 minutes. Warm rinse at 140°F(60°C).

9. Hot rinse then cold rinse until clear.