

## How to After-Fix Dye on Spandex<sup>®</sup> & Blends

### ***For Cellulosic/Spandex Blends***

- **Orcofix EC<sup>™</sup>** cationic/dicy formaldehyde type
- **Orcofix F-NF<sup>™</sup>** low-formaldehyde type

### ***Orcofix EC<sup>™</sup>***

**Orcofix EC<sup>™</sup>** is a dicy, formaldehyde, cationic resinous type after-treating agent designed to improve the wash, perspiration, sea water, and wet fastness of dyeings and prints on cotton, viscose, and blends containing Spandex<sup>®</sup>. It is miscible in water in any concentration and in most cases is compatible with CRF and durable type resins.

***In becks, package machines or jigs*** apply **Orcofix EC<sup>™</sup>** in the last cold rinse after dyeing. Raise the temperature to 120°F (49°C) and hold for 20 minutes. Dry without rinsing. If bath is heavily stained with precipitated dye, use a warm rinse (100°F (38°C)).

***On a continuous range*** apply **Orcofix EC<sup>™</sup>** at 120°F(49°C) after the last cold rinse and dry without rinsing. Depending upon the fastness requirements, depth of shade and the dye used, satisfactory wash fastness may be obtained without altering lightfastness by using 3-5% owg or in the case of padding, 4-5% on the weight of the bath.

***For blends containing wool*** to improve the wet fastness of dyeings dyed with Direct or Reactive dyes in conjunction with Acid dyes, use 4-6% owg **Orcofix EC<sup>™</sup>** owg at 85°-120°F(30-49°C)

### ***Orcofix EC<sup>™</sup> Removal/Stripping before re-dyeing***

If the material must be re-dyed or stripped and dyed, it is necessary to remove the fixing agent first by treating the material with 0.1% owg Hydrochloric Acid solution cold for 30 minutes, rinse and neutralize with Soda Ash, before stripping.

**Orcofix EC** should not be used with metallic salts. It is cationic in nature and therefore anionic auxiliaries should be avoided.

### ***Orcofix F-NF™***

**Orcofix F-NF™** is a non-formaldehyde fixing agent for direct dyes on cellulose and blends offering excellent wet fastness at an economical price. **Orcofix F-NF™** offers better lightfastness than conventional dicy (formaldehyde) fixes, improves wet fastness with minimum or no effect on hand, and produces minimum or no shade change attributed to after-treatment.

#### ***Application***

- 2.0 % owg                      **Orcofix F-NF™**
- 0.7 - 1.0 % owg              Acetic Acid 56%
- Run at 120°F (49°C) for 20 minutes.
- Drop bath and dry.
- Do not rinse.

#### ***Fix Removal***

- 3.0% owg Soda Ash or 1.5% owg Caustic Soda
- 10.0% owg Glauber's Salt
- Run at 200°F(93°C) for 30 minutes.
- Drop bath and rinse.
- Before dyeing, re-acidify.

### ***For Nylon/Spandex® Blends***

- **Orcofix MN™**
  - **Orcofix MN-1™** is designed for high-shear stability as is necessary when used in machines such as jets.
1. Set a new bath after dyeing, to 100-110°F(38-43°C) and add 1.0-1.5 % owg **Orcofix MN™/MN-1™** for light shades and 1.5-3.0 % owg **Orcofix MN™/MN-1™** for medium to dark shades.
  2. Adjust pH to 4.0-4.5 with acetic or formic acid and slowly raise the temperature to 160°F(71°C) and hold for 20 minutes.
  3. Rinse cold and dry.