

How to Hydrogen Peroxide Bleach Polyester/Cellulosic Blends using Continuous Method

Bleaching of Polyester/Cellulosic blends is typically for the cotton portion of the blend. The goods should be scoured prior to bleaching. Any processing bath involving rayon should not exceed a pH of 9.0 as it may lead to saponification of the rayon.

The first phase is to remove any sizing agents from the goods:

1. Set wet pickup to 70% and run goods through 140°F(60°C) bath containing a proper cellulosic enzyme and 0.15% owb **Orconol CHSA Conc™**.
2. Let rolls set for a minimum of eight hours.
3. Wash goods through a rope washer with water at 180°F(82°C) and dwell time of 15 seconds. This bath should contain no detergents or surfactants.
4. Pass goods through second washer at 150°F(65°C) with dwell time of 15 seconds.

The second phase is to scour the goods:

Do not exceed a pH of 9.5 when scouring rayon as the rayon will begin to saponify.

1. Saturate goods in a 125°F(53°C) caustic solution containing 4.0% owf sodium hydroxide and 0.25% owf **Orcoterge ALK-N Conc™**.
2. Hold goods in J-Box at 200°F-212°F(93°C-100°C) for 1 hour and 45 minutes.
3. Wash goods through two water baths; first at 160°F(71°C) for 15 seconds then 110°F(43°C) for 15 seconds.

The third phase is the hydrogen peroxide bleaching bath:

1. Pass goods through bath containing 1.7 oz/gal(12.5g/L) hydrogen peroxide and 2.66oz/gal(20 g/L) sodium silicate @ 42 °Be and hold in a J-Box for one hour at 210°F(99°C).
2. Wash goods through two water baths; first at 160°F(71°C) for 15 seconds then 110°F(43°C) for 15 seconds.