

How to Reduction Bleach/Scour Nylon/Spandex[®] in Beck or Beam

Do not exceed the boil in any procedure using Spandex[®] as the physical properties may deteriorate.

Do not use chlorine in any bleaching procedures with Spandex[®] as it will cause yellowing and possible degradation of the fiber. When using Hydrogen Peroxide with blends containing nylon, it is important to keep in mind that hydrogen peroxide, when used in high concentrations at high temperature, can degrade nylon. The procedure should be evaluated first on a laboratory basis to determine if the procedure is appropriate for the fabric under consideration before running in actual full-scale production.

A scouring and reduction bleaching procedure is as follows:

Enter goods into a bath at 100°F(38°C) and add:

- 0.25-1.00 % owg **Orcolite NF Conc™**
- 0.10-0.50 % owg Soda ash to a pH of 8.0-9.0
- 0.50-1.00% owg **Orcoterge ALK-N Conc™**
- 2.00-5.00 % owg **Orco Citrisolve DL-AAS-250™***

* Recommended for fabrics which contain a high degree of grease, oil and/or graphite.

- Circulate goods at 100°F(38°C) and raise temperature slowly to 160-170°F(71-77°C).
- Maintain this temperature for 45-60 minutes while checking the pH at 15 minute intervals. Add alkali if necessary to maintain the pH of 8-9.

If desired, an optical brightener may be added during the reduction bleach but compatibility should be checked either by reviewing our **Orco Synthrowite™** optical brightener product line or contacting your ORCO technical representative.

- At the completion of the reduction step, the bath should be cooled to 120°F(49°C) and dropped.
- Refill and run a warm rinse at 100-120°F(38-49°C) for 15 minutes. Drop this bath and refill.
- Add 1.0% owg of hydrogen peroxide 35% and raise temperature to 100-120°F(38-49°C) and run for 15 minutes. Drop bath, and extract.

It is very important to be sure that any traces of reducing chemicals are not carried over into the dyeing cycle if the goods are to be used as a ground for pastel or deeper shades.