

## How to Scour & Reduction Bleach Nylon in a Beck or Beam

Scouring of Nylon is recommended before any heat-setting, bleaching, or dyeing processes are performed on the goods. Scouring will remove any excess oils, waxes, lubricants, or general soil that may be left in the fiber after manufacture, handling, storage, etc. For the most part nylon preparation consists of scouring with detergents which may consist of nonionic ethoxylates or anionic detergents in conjunction with various builders, sequestrants and alkali to remove contaminants as described above. Nylon containing graphite, such as lace, should be scoured before storage as graphite becomes more difficult to remove over time.

In addition to the general scouring, nylon is sometimes whitened as a base for pastel shades or even optically brightened. This may be performed after scouring or as one step during the scouring operation. This whitening is generally achieved through the use of either oxidative or reductive type bleaches. The following represents a typical procedure which would cover 60-70% of the normal requirements.

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

0.25-1.00 % owg	<b>Orcolite NF Conc™</b>
0.10-0.50 % owg	Soda ash to a pH of 8.0-9.0
0.50-1.00% owg	<b>Orcoterge ALK-N Conc™</b>
2.00-5.00 % owg	<b>Orco Citrisolve DL-AAS-2™*</b>

\* 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 raise pH to maintain a pH of 8-9.

If desired, an optical brightener may be added during the reduction bleach but compatibility should be checked either by reviewing the optical brightener section of this program 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%, 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.