How to Bleach Wool Using Oxidation Method

In addition to full whites with or without optical brighteners, it is sometimes desirable to reduce the natural coloration of wool for the dyeing of pastel and brighter yellow shades. This is achieved on a batch basis over night or with elevated temperatures in a more limited time. The following procedure is a starting point and may be modified for various equipment and degrees of whitening necessary:

**Method 1:**

Immerse goods into bath containing the following chemicals and raise the temperature to 120-130°F (49-54°C), shut off heat or energy source (i.e. steam), and allow to set over night at ambient conditions being careful to ensure that the goods are completely immersed. In the case of pad batch, the roll is covered with a plastic wrap in such a way that neither the edges or the outside dry out.

- 7 lbs Sodium Silicate
- 2 lbs Soda Ash
- 1 lbs **Orcoterge ALK-N Conc™**
- 23 lbs Hydrogen Peroxide 35% (2.25 gal.)
- 100 gal

After examining the goods, scour off at 100-120°F (38-49°C) in the beam, jig, beck or continuous scour train. Re-acidify goods to pH of 4.5-5.5 with either acetic or sulfuric acid.

**Method 2:**

By raising the temperature to 120-130°F (49-54°C) and maintaining this temperature, the bleaching time may be reduced to 1 ½ to 3 hours time. All else, including chemical concentration and the scouring-off procedure, remain the same.