

# Neoquest series

# **Neoquest PSS**

# Peroxide stabilizer and sequesterant for combined scouring & bleaching baths.

### **INTRODUCTION**

Water is prime source of heavy metal salts. The hardness present in water can be taken care by using water softening plant. However it does not eliminate the metal salts of Copper, Iron, Nickel etc. These metal salts cause problems in textile wet processing. These metals are chelated by **Neoquest PSS**.

In scouring baths, high pH and temperature lead to the decomposition of peroxide bleaching liquor and degradation of cellulose. The uncontrolled decomposition of hydrogen peroxide gives rise to OH radicals. These radicals attack the cellulose fibre starting with oxidation of the hydroxyl groups and eventually ending with the cleavage of the cellulose molecules, decreasing the degree of polymerization. This reaction is catalyzed by presence of heavy metals such as iron, manganese, copper and cobalt resulting in pin holes. In order to inhibit these reactions, **Neoquest PSS** has to be used.

**Neoquest PSS** is a special product for stabilizing alkaline hydrogen peroxide bleaching baths with sequestering properties. This is particularly advantageous when bleaching cellulosic fibres in the form of loose fibres, yarn or piece goods in package/cheese machines, jigs or winches by conventional methods.

#### **FEATURES**

- Metallic particles are ionized, therefore prohibiting destabilization of peroxide bleaching liquors.
- Removes minerals and difficult-to-eliminate pigments.
- Performs action of chelation for both alkaline earth metals as well for heavy metal ions.
- Decreases hardness present in water.
- No foaming. Hence suitable for Jet and soft flow machines.

#### **PROPERTIES**

Appearance Pale brown liquid

pH approx.6.0 Ionic character Anionic

Compatibility with

Cationics Poor Anionics Good Non-ionics Good

#### STALWART ADVANCE MATERIAL INDS

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Stability to

hard water Good electrolyte Good temperature Good

# SAMPLE RECIPE FOR PRETREATMENT OF KNITS

## Scouring & Peroxide bleach (liquor ratio 1:10)

Add chemicals preferably at 40°C

0.7 – 1.0 ml/l Neoquest PSS
0.8 – 1.0 ml/l Evosurf NDC
0.75 – 2 ml/l Lubatex ACA
3 – 5 ml/l caustic soda 36°Bé

3 – 6 ml/l hydrogen peroxide 35%

Heat to 98°C.

Treat at the boil for 45 – 60 minutes

Cool to 70°C. Drain

Rinse hot for 10 – 20 minutes at 80°C. Drain

Neutralize with

1ml/l Neutracid AAS for 15 – 20 minutes at 40-60°C. Drain

Remove residual peroxide with

0.7 - 1.0 ml/l Protozyme CPK for 15 - 20 mins at 40-60°C & pH 6-8.

Drain.

### **STORAGE AND HANDLING**

Precautions for safe handling	Do not eat, drink or smoke while handling the product.
Conditions for safe storage	Store in a cool, dry & ventilated area away from the sources of heat.
Shelf Life	6 months.

Note: Kindly refer SDS for further information on Storage & Handling.

# Neoquest is a registered trade name of Stalwart Advance Material Inds.

The information and recommendations presented here were based on our general experience and correspond to the state of our knowledge. They are intended to service as non-binding guidelines and must be adapted to the prevailing conditions. We cannot accept liability for any injury, loss or damage resulting from reliance upon such information.

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