

# Neoquest series

## **Neoquest PP**

### Protonic pretreatment for cellulosic knit fabric as well as for yarn.

#### INTRODUCTION

The role of Sequestering agents in Textile Wet Processing is widely known. Many of us are aware that the presence of ions of alkaline earth metals (calcium & magnesium) and/or other metals (especially iron) may have important negative effects on various wet processes, not only in pretreatment but also in dyeing. Purified and softened water is used in textile finishing mills, but this is not enough and specific auxiliary formulations containing complexing agents need to be added to the baths.

Apart from water, cotton is one of the source of metal impurities. Metal impurities present in the cotton cause major problems in textile wet processing. In order to remove the metal impurities present in cotton, demineralization of the yarn/fabric is the necessary step to be taken. This is also called as 'Protonic Pretreatment'.

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 polymerisation. This reaction is catalysed by heavy metals such as iron, manganese, copper and cobalt resulting in pin holes. In order to inhibit these reactions, **Neoquest PP** is widely used.

#### **FEATURES**

- Metallic particles are ionized, therefore prohibiting catalytic damage to cellulosic fibres and/or destabilization of peroxide bleaching liquors.
- Demineralizes cotton, removes difficult-to-eliminate pigments.
- Performs action of sequesterant for both alkaline earth metals as well for heavy metal ions.
- Acts as buffer and stabilizer in alkaline region
- Replaces organic acids required for neutralization during mercerizing, scour boiling and bleaching operations.
- Replaces the Sodium Hypochlorite bleach before the peroxide bleach with a protonic treatment.

#### STALWART ADVANCE MATERIAL INDS



#### PROPERTIES

Appearance	Colourless to pale yellow liquid
рН	approx.3.0
Ionic character	Anionic

Compatibility with -	
Cationics	Poor
Anionics	Good
Non-ionics	Good
Stability to -	
hard water	Good
electrolyte	Good
temperature	Good

#### SAMPLE RECIPE FOR PRETREATMENT OF KNITS

1. Discontinuous protonic treatment for knits

0.5 – 1 ml/l	Versetol NPA
	Treat for 20-30 mins at 40-50°C

- 2. Continuous Protonic pretreatment by the pad batch method for woven
- 2 8 ml/l Neoquest PP
- 1 4 ml/l Evosurf ASD Pick up 100% Batch 2 to 4 hrs at RT, wrapped in plastic foil, rinse hot, warm and cold.

#### **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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