

Evosurf series

Evosurf MFD

Multi-functional detergent having sequestering and peroxide stabilizing power.

INTRODUCTION

In order to prepare a quality fabric, it is necessary to remove the natural and man-made impurities present in the greige fabric. In case of cotton knitted fabrics, the soil to be removed comprises natural impurities like fats, waxes, pectin, mineral matter etc. as well as added impurities (lubricants) used in spinning the yarn. Achieving good absorbency necessitates the thorough removal of cotton wax, which is located mainly on the fibre surface, forming a very thin layer that prevents adequate wetting of the fibre surface.

Due to presence of alkaline earth metal impurities within the cotton fabric, the peroxide bleach on greige material carries with it the risk of a catalytic damage. Secondly, under high alkaline conditions it is difficult to avoid undesirable rapid decomposition of peroxide. Furthermore, high content of heavy alkaline earth metal in the fabric may cause problems in pre-treatment and subsequent dyeing and finishing process.

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. This reaction is catalysed by heavy metals such as iron, manganese, copper and cobalt.

In order to inhibit these reactions, it is necessary to employ an auxiliary that assist in wetting, emulsification, re-wetting, sequestering and peroxide stabilising. Such an auxiliary is added to the scouring and bleaching baths.

Evosurf MFD is a custom designed product that:

- (i) sequesters the metals, so that it can finally be eliminated in the final washing-off treatment,
- (ii) emulsifies the impurities like fats, waxes, pectins, mineral matter etc. present in the fabric and
- (iii) simultaneously stabilises the peroxide in order to bleach the fabric in efficient manner

FEATURES

- destabilization of peroxide bleaching liquors.
- Excellent stabilizing effect even at bleaching temperatures near the boil
- Excellent scouring agent with rapid wetting action and high cleaning power.
- Ideal product for combined scouring and bleaching baths.

STALWART ADVANCE MATERIAL INDS

Application & Business Center, B-120, Ansa Industrial Estate, Saki Vihar Road, Sakinaka, Andheri (E), Mumbai – 400 072.
email: sales@stalwartadvance.com; web: www.stalwartadvance.com; Customer care:1800 121 3497

- Exhibits good compatibility with all enzymes
- Stable in liquors with upto 30g/l caustic soda solid (ca.6°Bé)
- Ecological as it is free from APEO, EDTA, DTPA, NTA, silicates and phosphates.
- Removes mineral oil contamination and sizing agents and imparts excellent cleanliness and good absorbency to the material

PROPERTIES

Appearance	Pale yellow clear viscous liquid
pH	approx.3.0
Ionic character	Non-ionic

Compatibility with	
Cationic	Good
Anionic	Good
Non-ionic	Very Good

Stability to	
hard water	Good
alkali	Good (upto 30 g/l)
temperature	Good
oxidizing agents	Good

SAMPLE RECIPE FOR PRETREATMENT OF KNITS

Combined Scouring & Peroxide bleaching (liquor ratio 1:10)

0.75 – 2 g/l	Add chemicals preferably at 40°C
1.0 – 1.5 g/l	Lubatex ACA
3 – 5 g/l	Evosurf MFD
3 – 6 g/l	caustic soda 36°Bé
	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
1.0 g/l	Neutracid AAS/Acetic acid for 15 – 20 minutes at 40-60°C. Drain.
	Remove residual peroxide with
0.3-0.5 g/l	Protozyme CPK for 15 - 20 mins at 40-60°C & pH 6-8.
	Drain.

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Pad batch method

1.0-2.0 g/l Lubatex ACA
0.5-1.0 g/l Evosurf OSR
4.0-6.0 g/l **Evosurf MFD**
Pad cold
Batch 4 to 6 hrs at RT
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.

Evosurf 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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