

Evosurf series

Evosurf ADSR

Anionic detergent and stain remover for one bath scouring and bleaching of cotton woven and hosiery fabric, scouring aid for wool, and speciality product for combined scouring and dyeing of polyester fibres, yarn and fabric.

INTRODUCTION

Evosurf ADSR is a powerful alkaline stable detergent & oil stain remover having excellent alkaline stability required for alkaline boiling-off/desizing of fibres. It exhibits excellent wetting & re-wetting action for all types of fibres. Is biodegradable, APEO and solvent free, with an emulsifying and dispersing action that imparts not only good wettability to the textile material at the start of the pre-treatment but also good hydrophilicity at the end of the pre-treatment. This good hydrophilicity leads to the good re-wettability needed for the dyeing process.

FEATURES

- Excellent scouring agent with rapid wetting action and good cleaning action.
- Removes mineral oil contamination and sizing agents and imparts excellent cleanliness and good absorbency to the material
- Exhibits good compatibility with all enzymes
- Good pH stability and therefore a wide application spectrum, e.g. in scour boiling, bleaching, protonic treatments, bio washing etc.
- Stable in liquors up to 100g/l caustic soda solid (ca.6°Bé)
- Very low foaming
- Ecological as it is free from APEO, nitrogen and phosphorous.

PROPERTIES

Appearance	Clear colourless liquid
рН	approx. 8.0
Ionic character	Crypto-anionic

Compatibility with	
Cationics	Good
Anionics	Good
Non-ionics	Very Good

STALWART ADVANCE MATERIAL INDS



Stability tohard waterGoodalkaliGood (upto 100 g/l)temperatureGood

SAMPLE RECIPE FOR PRETREATMENT

The quantity of **Evosurf ADSR** to be used depends upon the nature of stain to be removed. However, following guidelines need to be followed at different application stages.

Strong stain	Direct application
Desizing Cellulosics	4 g/l
Alkaline Boiling Off of Cellulosic blends	20-40 g/l
Scouring of 100% Cotton knits	1-2 g/l
Heavily soiled goods	10%
Oil stained grey cotton goods	20-50 g/l
De-pitching wool	2-40 g/l

Desizing Cellulosics

X g/l	Protozyme ADS
4 g/l	Evosurf ADSR
2 gl	Neoquest PP
2 g/l	Caustic soda 36°Bé
	Temperature : 80°C. pH : 7-8
	Time : Cold Process : 6 hrs. High Temperature Process : 2 mins

Alkaline Boiling-off of Cellulosic blends

20-40 g/l	Evosurf ADSR
1-3 g/l	Neoquest HRS
40–80 g/l	caustic soda 36°Bé
20–40 g/l	hydrogen peroxide 35%
	At boil for 20–30 mins.

Bleaching of 100% Cotton knits

1-2 g/l	Evosurf ADSR	
0.5-1 g/l	Oxystab IPS	
2 g/l	caustic soda	
2-5 g/l	Hydrogen Peroxide	

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Desizing Polyester fabrics

I. Desizing fabrics containing sizes with acrylic copolymers (ammonium salts)

1) On discontinuous machines

a) Jigger	
6-10 ml/l	Evosurf ADSR
2 g/l	Na_2CO_3 or
5ml/l	NaOH 30%
1-3 g/l	Neoquest HRS

Conditions: 95°C/4 passages; drain bath Washing with soft water at 90°C/2-3 passages; drain bath Washing with cold water and, If necessary, acid neutralization.

b) Overflow Jet/Beam

5-7 ml/l	Evosurf ADSR
2 g/l	Na_2CO_3 or
4ml/l	NaOH 30%
1-3 g/l	Neoquest HRS

Conditions : 90°C/30'; drain bath Washing with soft water at 80°C/10'; drain bath Washing with cold water and, if necessary acid neutralisation

Note: For very dense/compact (e.g. microfilament-twisted), delicate (e.g. satins) fabrics and those with high size concentrations (e.g. textured), double desizing is recommended. Even when using (<1:4) liquor ratios, double treatment is sometimes necessary. If softened water cannot be used, demineralisation is essential, adding a sequestering agent and alkali before loading the fabric in the jigger, to prevent hardness inhibiting resin solubility from the very beginning. In the latter case, we recommended a slightly lower desizing temperature (85-90°C). We advise you not to desize in the beam polyester fabrics sized with acrylic resins when purified water cannot be used.

2) On continuous machines

Adjust the quantity of caustic soda in the recipe according to permanence time of fabric in the treatment bath, carefully taking into account the availability and efficiency of final washing. Obviously, the percentage of size on the fabric and fabric characteristics (weave-number of threads and wefts/cm) are important, and, therefore, the best running conditions for the system must be defined from time to time.

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10-15 ml/l	Evosurf ADSR
1-2 g/l	Na_2CO_3 or
5ml/l	NaOH 30%
1-3 g/l	Neoquest HRS

Conditions: 90-95°C/ (permanence time according to system used) Washing with soft water at 90-95°C in at least 2 bowls Washing with cold water and, if necessary acid neutralisation

Note :

Partially drain off by overflow, replacing the treatment bath and washing waters.

II. Desizing fabrics containing soluble polyester sizes

In recent years these polymers have been widely used for sizing polyester thread, thanks to their properties which have led to substantial improvements in performance and output. Contrary to acrylic based sizing, these products do not readily support desizing treatments with alkaline baths. pH quantity being equal, the type of alkali used, according to its "ionic power", accelerates the resin insolubilization process and, therefore, **strong alkali such as caustic soda must be strictly avoided**, whereas sodium carbonate and, better still, ammonia are more suitable. In any case, do not exceed pH 10.0. To remove sizes containing soluble polyester, the similar recipe (used for acrylic sizes) can be followed, provided alkali must not be used.

III. Desizing fabrics containing vinyl resin sizes

This size category is much less used compared to acrylic and soluble polyester sizes. However, desizing conditions are similar to those described for soluble polyester sizes.

IV. Single-bath desizing of acrylic -polyester-vinyl sizes

The need to use a single bath for simultaneously desizing all three types of size applies in particular to continuous machines.

On continuous machines

10-12 ml/l	Evosurf ADSR
1.0-1.5 g/l	Na ₂ CO ₃
1-3 g/l	Neoquest HRS

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Conditions: 90-95°C/ (permanence time according to system used) Washing with soft water at 90-95°C in at least 2 bowls Washing with cold water and, if necessary acid neutralisation.

Note : The desizing bath and the rinsing bowls must be constantly reinforced to avoid dangerous size deposits. We advise you to use "overflows" or even fully replace the bath if sizing products accumulate in excessively in the bowls. The ideal working pH value is from 9 to 10.

V. Desizing rayon acetate fabrics

To select the best desizing conditions for acetate rayon, one must in particular consider the following conditions:

i) temperature should not exceed 80-85°C

ii) use of sodium carbonate and not caustic soda

iii) machinery preventing increases foam forming

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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