Siligen® Softener SIE

Silicone softener for finishing textiles.
Nature
Aminofunctional polysiloxane

Physical form
White, slightly opaque emulsion

Shelf life
Siligen® Softener SIE can be kept in the original sealed containers at temperatures between 5 and 30 °C for at least 9 months. Partly used containers should be kept tightly closed and used up as soon as possible.

Properties

Ionicity
Nonionic

Product specification
Tolerances for test characteristics are given in the product specification

Solubility
Miscible with cold water in all proportions

Compatibility
Siligen® Softener SIE is compatible with most finishing agents. When several products are to be mixed together, their compatibility should first be tested.

Application

Fields of application and finishing effects
Finishing of woven and knitted goods composed of cellulosic fibres and their blends with synthetics fibres.

• Very smooth and soft handle
• Improves tear strength and abrasion resistance
• Improves sewability
• When applied in resin finishing, Siligen® Softener SIE reduces the tendency to creasing.
• The finishing effects show high fastness to washing.
• Increased resilience
• Improved shape recovery of knitwear

Application conditions
Siligen® Softener SIE is applied by padding at room temperature. The liquor pick-up is 60-90 %, according to fabric type.

Application rate
10-50 g/l Siligen® Softener SIE

Guideline recipes

**Shirting fabric (cotton)**
30-60 g/l Fixapret® Resin F-AP
10-18 g/l Fixapret® Catalyst LF
20-30 g/l Siligen® Softener PEW
15-30 g/l Siligen® Softener SIE

Pick-up: 70 %
Drying: as usual
Curing: 4 min at 150 °C

**Blouse fabric (viscose rayon)**
60-90 g/l Fixapret® Resin F-ECO
10g/l Fixapret® Catalyst FB
15-23 g/l Fixapret® Catalyst F-M
20-30 g/l Siligen® Softener SMS
20-40 g/l Siligen® Softener SIE
Pick-up: 80 %  
Drying: as usual  
Curing: 30 s at 180 °C  

**Outerwear, knitgoods (cotton)**  
30-60 g/l Fixapret® Resin PC  
10-30 g/l Siligen® Softener SIE  
20-30 g/l Siligen® Softener PEW  
20-30 g/l Siligen® Softener SMS  
Pick-up: 80 %  
Drying: as usual  
Curing: 30 s at 170 °C  

**Notes**  
The ready-to-use finishing liquor should have a pH of approx. 5.0.  
1 g/l prediluted Kieralon® XC-J Conc. should be added to all recipes.  
The permanence of silicone-containing products on fabric demands care and attention, because faulty batches are very difficult to correct.  
Alkaline goods should be adjusted to a slightly acid pH before finishing.  
The wash and rub fastness of coloured and printed goods are generally unchanged. Only in rare instances do these properties deteriorate.  
An adverse effect on the degree of whiteness is very unlikely under normal curing conditions.  
It is advisable to carry out preliminary plant trials in view of the many effects that pretreatment, dyeing, printing, finishing and formulating the finishing recipe may have on the colour fastness properties, shade, degree of whiteness, fabric strength, odour, handle, and possible “white crackling” after washing. This applies particularly to white- and pastel-coloured and –printed goods, where there may be an adverse effect on the degree of whiteness or the shade.
Safety

When using this product, the information and advice given in our Safety Data Sheet should be observed. Due attention should also be given to the precautions necessary for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. Responsibility for compliance with the requirements of the downstream textile market rests with the textile processor.