



Smart. Sustainable. Protecting.

Cell Solution® PROTECTION – The textile innovation with embedded Permethrin (active agent).

Cell Solution® PROTECTION offers a unique fiber technology based on a Lyocell Fiber with Permethrin incorporated directly into the fiber matrix. The fiber we developed is classified as a treated article under applicable law and therefore does not fall under the EU Biocidal Products Regulation.

The Cell Solution® PROTECTION fibers contain Permethrin that is permanently incorporated during the spinning process. This integration takes place deep inside the fiber structure, without nanotechnology, without capsules, and without surface coatings. The embedded substance remains part of the fiber throughout the product's lifetime of your garments or technical textiles, even after 100 washes at 60°C.

Natural and sustainable materials meet advanced fiber engineering. The breathable, moisture regulating cellulose base ensures a soft and skin friendly touch. Cell Solution® PROTECTION represents

pure fiber intelligence, contributing 10 - 20% of the fabric composition depending on the application.

Certified according to OEKO TEX® Class 1, the technology also meets the requirements defined in the technical delivery conditions (TL) of the German Armed Forces for materials containing Permethrin.

Cell Solution® PROTECTION - a fiber technology designed to accompany you every day. Effortlessly. Without compromise.



Cellulose - a natural product

Cell Solution® is made of wood from sustainable forestry. Cellulose is breathable and regulates moisture. Textiles made of cellulose are more absorptive than cotton, they are silkier than silk and cooler than linen. The fiber naturally absorbs excess moisture and progresses it away from the body. The ability of cellulose to transport moisture is superior to that of the synthetic fiber. The fiber structure supports a pleasant skin climate and is temperature-balancing.

In accordance with EN 17487, Cell Solution® PROTECTION is authorized for application in protective garments aimed at minimizing tick exposure.

Datasheet		2,3 dtex / 38mm
Cellulose FSC	%	> 61
Active substance Permethrin	%	8 - 10
Moisture	%	< 10
Stabilized paraffin	%	App. 16
Tenacity, conditioned	cN/tex	> 21
Tenacity, wet	cN/tex	> 17
Elongation, conditioned	%	12 - 15
Elongation, wet	%	12 - 15
Loop tenacity	cN/tex	7 - 9
Wet modulus	cN/tex	> 110
Whiteness		17 - 30

Range of applications

stocking and socks

care gloves

outdoor articles

Medical Wear and hospital clothing

Hometextiles such as bedding, bedlinen and mattresses



Please contact us if you have any further questions
or would like to have more information.

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