Clean and dry, naturally

ecorepel®

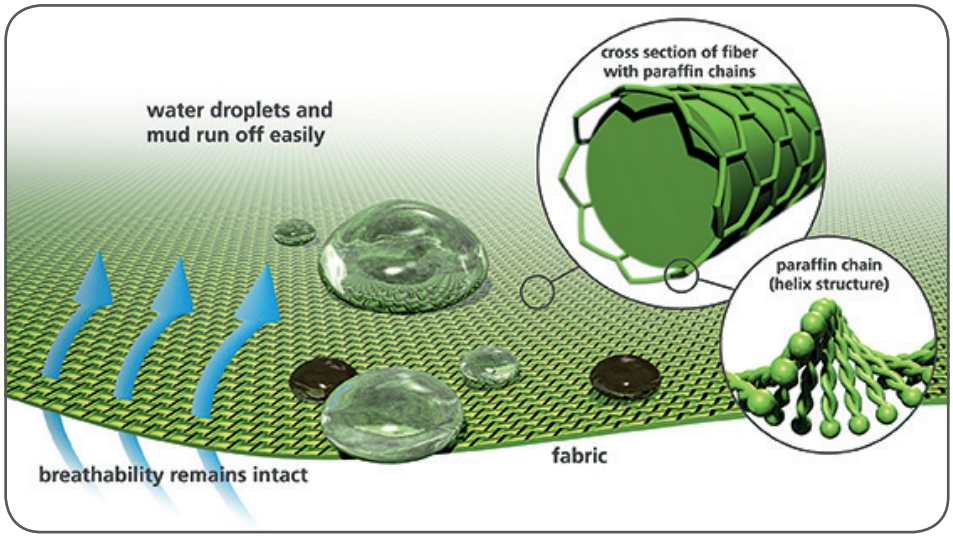
a schoeller® technology

ecorepel®, the ecological way to repel water

Isn't it fascinating how ducks can dive under water and re-emerge with their feathers still dry? Like all waterfowl, ducks produce an oily secretion that allows their plumage to repel water. The ecorepel® technology transfers this natural water repellence to textile surfaces.

Function

ecorepel® imitates this natural protection as a highly-functional, odorless high-tech finish. It is based on long paraffin chains that wrap themselves spiral-like around the individual fibers, filaments or yarns in a very fine film. A sophisticated docking system binds them to the fibers. The honeycomb-like paraffin structures consist of hydrocarbon chains that are arranged over the whole area and reduce the surface tension. Water droplets and even mud with significantly higher surface tension, run off easily.



Benefits

- water and mud repellent
- environmentally sound
- wash and abrasion resistant

Care/properties of ecorepel®:

- excellent wash resistance
- very high resistance against abrasion and friction
- no effect on the breathability (as per ISO 11092)
- no effect on the feel
- wide range of possible uses
- reactivation of function through tumble drying or ironing

Ecology

ecorepel® is free from fluorocarbons and PFCs and therefore free from PFOA and PFOS. ecorepel® exhibits a high level of water and dirt repelling performance without any fluorochemical components. Furthermore, the technology is biodegradable in accordance with OECD 302 B (80-100 %) and passes OEKO-TEX® Standard 100. In addition, all components of ecorepel® are bluesign® approved. Properly applied, it allows production with minimum impact on humans and the environment.

bluesign® APPROVED

CONFIDENCE IN TEXTILES
Tested for harmful substances
according to Oeko-Tex® Standard 100
TESTEX

Technology

Test procedures to assure the quality

Schoeller Technologies AG guarantees optimum quality and ensures that textiles finished with ecorepel® meet the determined test requirements. Our services include individual adjustment of the recipes and technical support for the mills.

In our laboratory, each production batch is subjected to Spray Test AATCC 22 in order to assure the quality and durability of ecorepel®.

Water Spray Test on outer side (Spray test AATCC 22-1996/ISO 4920)	original	washed (5 wash cycles 40° C 7A LTD)
Assessment/minimum requirement	90-100	90-100

The ecorepel® finish can be optimized in order to pass the Raintest AATCC Test Method 35-2006.*

*As the functionality depends on the material and the fabric construction, preliminary tests in cooperation with Schoeller Technologies AG are recommended.

Abrasion resistance and durability

Internal tests show excellent abrasion results for ecorepel®. In these procedures, a variety of fibers were tested. In the case of fabrics made of polyamide/elastane, a spray value of 100 (as per AATCC 22-1996/ISO 4920) was still attained after 10 washes and 10,000 abrasion cycles. Textiles made of polyester showed a constant value of 95 after 10 washes and 10,000 abrasion cycles. The steady performance of ecorepel® stands out particularly positively against other durable water repellents (DWR).