

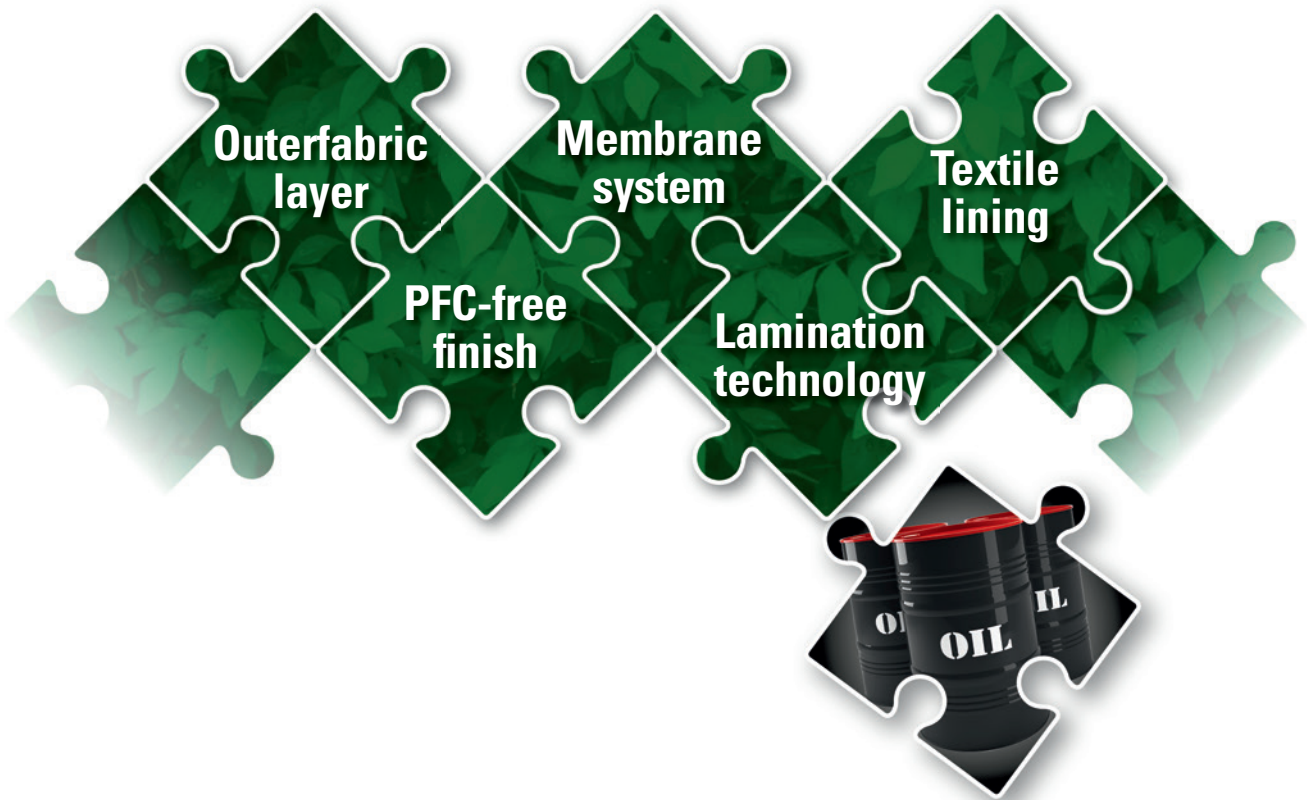
Bio-based laminates



Bio-based to the max

We strive to incorporate as large a proportion of renewable raw materials as possible into every element of our watertight and breathable bio-based laminates. And we do this without impeding performance, protective function or comfort.

Bio-based functional textile materials lessen the dependence on fossil petrochemical raw materials. Hence replacing carbon constituents with renewable elements – in the interests of sustainable development and a future-oriented circular economy.



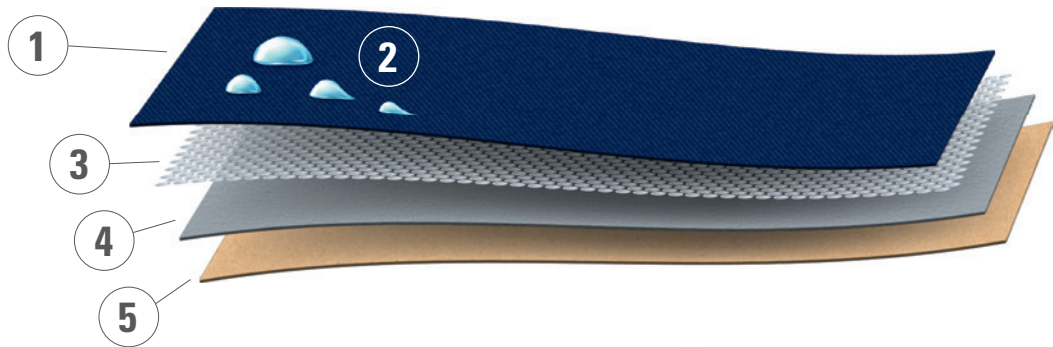
Natural raw materials from responsible sources

When it comes to natural fibres and biopolymers, Trans-Textil draws exclusively on certified raw materials from responsible sources that would otherwise not be used as foodstuffs. These materials come from sustainable cultivation or are the by-products of food production, such as orange and banana peel, coffee grounds or crop harvest waste.



Renewable components throughout the entire laminate

We use the highest proportion of renewable raw materials possible in every element of our bio-based two- and three-layer liner, hardshell and softshell laminates. The overall concept encompasses everything from the outerfabric and lining layer to membrane systems and lamination technologies, right through to the PFC-free, water-repellent fabric finishing. The flexible combination of technologies permits the development of highly individual material concepts in multilayer composites.



1 *Outerfabric layer*
Bio-based PES and PA, natural fibres or lyocell



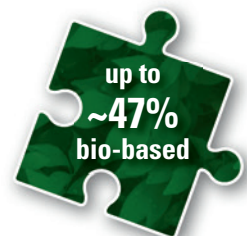
2 *PFC-free, water-repellent finish*
Topaz clean4green®



3 *PU hot melt systems*
Durable Point-in-Point® lamination technology



4 *Topaz ELEMENTS® membrane systems*
Hydrophilic compact system, breathable and watertight



5 *Textile inner layer*
Bio-based PES and PA, natural fibres or lyocell



Sustainable performance

With regard to a long life cycle, reliable protection and comfort, bio-based textile materials offer a proven level of technical performance that is on par with their conventional petrochemical counterparts. This makes them well suited for sophisticated functional fabrics used in outdoor and sports products, workwear and footwear components.



Waterproof: water-column rating of >10 metres (ISO 811)



Breathable: >10,000g/m²/24h (MVTR)



Water-repellent fabric finishing with excellent spray values



Abrasion resistant



High level of rub fastness



Machine washable



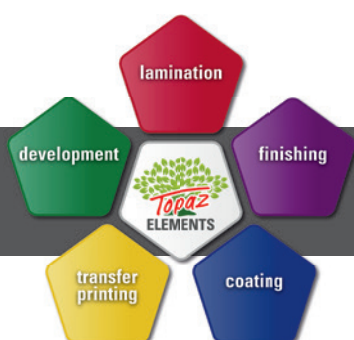
Lining made from natural fibres feels pleasant against the skin



Certified as safe from a human-ecological perspective in accordance with STANDARD 100 by OEKO-TEX®



**Textile Technology
Made in Germany**



Trans-Textil GmbH
Pommernstr. 11-13
83395 Freilassing | Germany

Phone: +49 (0) 8654 6607 -0
Fax: +49 (0) 8654 6607 -10
e-mail: info@trans-textil.de

www.trans-textil.de