



SGB WEEKLY

ISSUE 1545
NOVEMBER 9, 2015

THE WEEKLY DIGITAL MAGAZINE FOR THE ACTIVE LIFESTYLE MARKET

What's In Your Jacket?

SGB brings the fall run-down of some of the latest fabrics and technologies. While not exhaustive, and you won't need the periodic table to decode the material make-ups, our list explores and explains a few of the innovations retailers and consumers should be looking for this winter and next spring.

By Aaron H. Bible



SYMPATEX

Munich-based Sympatex is one of the leading premium ingredient brands in the field of functional textiles - developing, producing and distributing high performance membranes, laminates, functional textiles and finished products with brand partners worldwide.

The Sympatex membrane is, according to the company, 100 percent waterproof and 100 percent windproof, as well as optimally breathable. The non-porous Sympatex membrane is "guaranteed green" - 100 percent recyclable much like a PET bottle. It is made of polyether/ester, a combination of polyester and polyether molecules, and therefore, the brand said, completely eco-friendly as well as safe on the skin. It does not contain any fluorine compounds as some other liners do and is both PTFE-free and PFC-free. "It is Sympatex' standard practice to aim for the highest possible eco-friendly production level throughout the entire supply chain. We are pursuing this objective together with brand partners who share the same ecological philosophy," the company said.

Uniquely, Sympatex has no pores and works on a purely chemical and physical principle. Hydrophilic components of the Sympatex membrane absorb moisture from the body and transport it to the outside so that it can evaporate, while at the same time the pore-less structure of the membrane prevents the ingress of rain. The brand said this means clothing featuring Sympatex are extremely easy to look after and can be washed as often or little as you like.

The latest technology for its apparel is a 2.5-layer laminate called Phaseable. Three-dimensional Phaseable, which is ecologically compatible and produced in a sustainable way, influences the body climate of the wearer in an intelligent way. According to the brand, this half-layer on the inside of the laminate only touches the skin punctually in the form of foam points. During an athlete's recovery phase, an insulating air layer is created between the skin and the laminate. When physical activity is increased, moisture is produced, which lets the compact hydrophilic Sympatex membrane swell. Thus, the foam points disappear, the distance to the skin is reduced, and the laminate gets closer to the skin. The dynamically active Sympatex membrane also increases moisture transport.

37.5

37.5 technology was created by Cocona Inc., a world leader in the development, commercialization and marketing of active particle technologies to enhance the technical performance of clothing, footwear and sleep systems. Cocona was established in 2000 and rebranded as 37.5 in 2013. Previously, 37.5 technology was marketed under the Cocona brand name, as its original active carbon particles were derived from coconut shells. The technology has since been expanded to use additional natural materials. The company is headquartered in Boulder, CO.

Victorinox is one of the first contemporary menswear brands to put 37.5 technology into everyday pieces. Their Limited Edition series consists of eight offerings all made with 37.5 technology that work functionally together. These include the Ranger Zip jacket, Reversible Bomber, Trail

Leader vest, Pathfinder hoodie, Vanguard Henley, Recon t-shirt, and Minutoli cargo pant.

Another example, the Spring 16 launch of Carhartt Force Extreme with 37.5 technology includes a Cargo Pant, Zip-Off Pant, Cargo Short, Pocket Polo, Sleeveless T, Quarter-Zip Long Sleeve Shirt, and the Short Sleeve T. Through a unique partnership, Carhartt is the only U.S. workwear brand with 37.5 technology.

The Bontrager brand from Trek is enhancing their 37.5 merino baselayer program with two waterproof breathable jackets featuring the technology - the Velocis Stormshell jacket and hooded Lithos Stormshell. Bontrager is also releasing the Stormshell Oversock with 37.5 for riding in extreme weather. Snowboarding brands Nitro and Homeschool use layering 37.5 to keep riders dry and warm. Nitro just released the Pioneer series of shell jackets, pants and bibs, along with midlayer and baselayer pieces, all packing the punch of 37.5 technology.

NAU

One of the coolest tidbits of news in material innovation is recycled down from Portland-based clothier Nau, one of the first brands to integrate a

WL GORE

Released at ORW and SPO in January, WL Gore introduced a third tier in its waterproof breathable laminate technology for makers of performance outerwear, now available in more than a dozen Gore-Tex brand patterns. Gore is credited with inventing the ePTFE micro-porous membrane that equated superior in waterproof breathability since 1985.

Added by Gore is more than just an incremental innovation, the new Gore-Tex C-Knit features a herringbone, ultra-finegrain woven backer construction that will roll out in Fall 2015. The company claimed it is up to 15 percent more breathable and 40 percent lighter than three-layer Gore-Tex laminates with traditional Ticot backers.

The company launched Gore-Tex Active in 2011, followed by Gore-Tex Pro in 2013. To put it simply, C-Knit will be less crumby but more breathable than Gore-Tex Pro, but equally less breathable than Gore-Tex Active.

Gore product developers are calling C-Knit "the most versatile 3-layer fabric ever" while "maintaining the Gore-Tex guarantee of being 100 percent waterproof and windproof." Development began in 2012 and international guides and athletes tested more than 100 samples. The new backer material is 20 to 50 percent lighter as a raw material (garments may only be 10 percent lighter), and Gore is developing a new seam tape for this product, designed to stretch more easily around curves.



According to Gore Product Specialist Chris Meyer, the goal was a robust yet softer backer that could be used for multiple outdoor environments. "The key element is high air flow, which is achieved through a backer (the mesh, thin layer) laser generated construction of an extremely fine mesh, and procedure engineered to complement it. C-Knit is made in circular knitting machines - only one of which currently exists but Gore said it will build up to four more to support product.

C-Knit targets bikers, triathletes and free riders who Gore found research to be missing versatility and comfort that previous T fabrics were not able to provide. According to Gore Fabric Manager, the company saw a global hiking market of 500 million with 1.2 million participants and 10 million people participate outdoors at least seven days per year. These 500 million also help explain Gore's massive push into the water/sports footwear space, going large with its Gore-Tex Footwear. It's global partner brands La Sportiva, Salomon and Ecco.



Photo courtesy: Bontrager
Kilowatt Downer Wind Shell Layer

POLARTEC
Polartec is now introducing its new Delta fabric and Power lock with unique properties.



COLUMBIA

Although much has already been written about OutDry Columbia Sportswear who acquired the technology in 2010, here's how they got through in Mountain Hardware brand and consequently in Columbia gloves and shoes, in new utilizing the material technology in a new way to outdoor.

OutDry features a patented lamination process that bonds a waterproof membrane directly to the garment's highly breathable outermost layer. The company's blog sums it up best: "With OutDry Extreme, we've turned waterproof breathable jacket technology inside out. This patent pending technology is a totally new approach to rainwear. OutDry Extreme is the first waterproof also-breathable jacket with a waterproof membrane on the outside of the jacket for permanent water repellency and durability. By putting an abrasion resistant membrane on the outside where it's in contact with the rain, there is virtually no risk of the fabric wearing out like others do when their DWR wears off. This is a durable, permanent waterproof fabric that actively repels moisture and rain. OutDry Extreme is also breathable thanks to microscopic perforations in the membrane that allow moisture to escape while keeping rain at bay. The interior lining is a wicking mesh that enables more breathability and even a skin-on-skin comfort, as opposed to a plastic feel next to skin."

OutDry Extreme technology even looks waterproof. In line with Columbia's strategy of visible apparel technology, the OutDry Extreme

range will be branded by Columbia's Titanium logo and will be for active Columbia three performance lines: Golf, Performance and Trail. It will be available Spring 2016 in 19 styles of jackets and pants, in 6 colors, from \$100 to \$200.

PRIMALOFT

Primaloft Silver Insulation Active continues to be a top star this growing segment brand. Primaloft Silver Insulation Active according to the company, the only insulation solution offering both breathability and unsurpassed thermal properties, designed specifically high-output adventures.

It is soft, packable and water resistant, allowing wearers to adjust on levels during intense activity. With an industry leading warmth-to-weight ratio, the construction of Primaloft Silver Insulation Active enables heat and moisture to escape, keeping the user comfortable, warm and from a superior standpoint, Primaloft Silver Insulation Active is a product designed to utilize a much wider variety of breathable than other fabrics, resulting in more year-round choices for consumers material is now Blomberg and Ocho-Tex Standard 100 approved as

NOVEMBER 9, 2015 | SGBweekly.com



Lithos Stormshell Jacket
Photo courtesy: 37.5