

BRANDS, CIRCULARITY, MATERIALS, OP-ED, POLLUTION, SUPPLIERS

RPET SHORTAGE AND PFC BAN ARE YOU READY?

BY CHARLES ROSS

Incoming sustainability legislation will demand tangible results in terms of material developments, with the first major blow landing on those with products heavily dependent on rPET and PFCs. Are brands flexible enough to meet the coming “new normal”?

The single biggest influence for any brand with stakes in European markets is associated with the EU Green Deal’s Ecodesign legislation. This legislation is designed to improve product circularity, energy consumption and a range of other environmental criteria, and is scheduled to take effect next year.

rPET in the crosshairs

One important move towards the Circular Economy will involve waste PET drink bottles being looped back into new bottles, as opposed to downcycled into textiles. Yet today, over 95% of recycled textile feed-stock comes from this source. In other words, there will be a shortage: rPET is currently the fibre that’s in the greatest demand in the Outdoor & Sports industry.

Fortunately, technology has allowed for the development of polymers from natural sources (like using the PLA from starch) – but these bio-plastics are unlikely to be able to scale up fast enough to fill this gap. The faster growing category is recycled polyamides from waste car tires. Whereas polyamides are associated with performance textiles, there are now also other varieties including fleece. Alongside this, viscose applications like Tencel have similarly expanded.

Alongside this is the promising news that WornAgain is getting their plant set up in Zurich; this technology allows for mixed fabrics to be chemically separated & repurposed. As an example, it can extract both rPET & cellulose out of a polycotton fabric.

PFC ban expanding

PFCs are being eliminated, with bans taking place on both sides of the Atlantic. Beyond DWR finishes, now PFCs used to create the micro-porous holes in PTFE membranes are also included. This is arguably the most disruptive event in the permeable waterproof membrane market over the last three decades, with trends towards micro-porous Olefins (better known as polypropylene) & Hydrophilic Membranes.



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Some brands and ingredient brands are already getting ahead of this legislation with successful products. Helly Hansen, for example, won a Gold Outstanding ISPO award for their olefin membraned insulated jacket in 2020; at November's ISPO, the Amphibio olefin membrane won the recent ISPO BrandNew award. The new Gore-tex membrane is also an olefin, while the Sympatex membrane is a hydrophilic. The exception is the Dimpora membrane which uses limescale to create their micro-porous holes.

Solutions at Performance Days

These material challenges are reaching an inflection point much sooner than many are probably prepared for. Finding out what solutions are available to overcome them will be a key topic at the upcoming Performance Days fair taking place in Munich between March 15-16. Here, attendees can follow expert presentations and check out the latest PFC-free and recycled materials in the Performance Forum.

Whereas fabrics being introduced in SS24 will be at the show; the question of which membrane and recycled material to use needs solving as the changes to production planning are happening next year. Products under development with samples being made today will be affected next year.

In other words, this problem needs resolving now.

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