Re>Close the loop. **Bio-based.**

Sympatex Membrane:

Bio-based, recyclable, windproof, waterproof and breathable.

In general, there is an urgent need to move away from fossil-based materials in various industrial sectors to mitigate climate change. Bio-based membranes for functional apparel and footwear could be part of the solution.

Sympatex bio-based membranes are driving the industry's transition from conventional to renewable resources. We convert bio-based waste streams into our 100% waterproof, high performance membrane using mass balance principles.

25% bio-based content

less CO₂ emissions **25% bio-based content** in our Sympatex membrane leads to **12% less CO₂ emissions** per kg of polymer compared to a purely fossil-based polymer. Further reducing the carbon footprint of our membrane by replacing fossil-based raw materials with renewable raw materials remains one of our strategic goals for the coming years.



In this way, Sympatex is supporting you:

- 1. Ongoing efforts to reduce the carbon footprint of your products.
- Fulfilling the Paris Agreement and the Fashion Industry Charter for Climate Action: reducing CO₂ emissions by 30% compared to 2015 – much faster!
- 3. Mass balancing: Composition and performance remain exactly the same no re-qualification.
- 4. Combining high product performance with uncompromising responsibility for future generations.
- 5. Doing what is technically possible to optimise our products at every level.
- 6. Establish ecologically responsible thinking as a matter of course in the textile industry and set an example for others.

www.sympatex.com

What is bio-based in our membrane?

Our bio-based membrane is partially made from building blocks derived from organic agricultural waste that has absorbed CO₂ from the atmosphere during its growth phase. In due consequence, the amount of embedded fossil carbon in our membrane is reduced. We ensure that we only use waste for our materials that does not compete with food production.

Bio-based vs. recycled content

We continue to focus on the circular economy for textiles by using our industry's own waste streams. We are also looking at every technically feasible way to minimise our footprint, and therefore yours. We don't have to choose between bio-synthetics and recycled polyester. For the fashion and textile industry to meet its climate change targets, we need to use every tool at our disposal. It is about creating the smallest footprint.

Do bio-synthetics affect membrane performance?

No. We guarantee that every Sympatex membrane retains its high performance values in terms of breathability, waterproofness and windproofness and is fully recyclable at the end of its life cycle. Because replacing fossil-based raw materials with bio-based ones doesn't necessarily change the chemical structure of a material, it doesn't affect its properties.

Why do we need bio-synthetics when we can use recycled synthetics?

Our aim is to leave less of a footprint on the planet. To achieve this, we are using smart approaches or even combining them. Textile-to-textile recycling will be a big part of the solution, but we still need raw materials from other non-fossil sources as well. Adding bio-based content to our membrane is an important step in reducing our impact.

