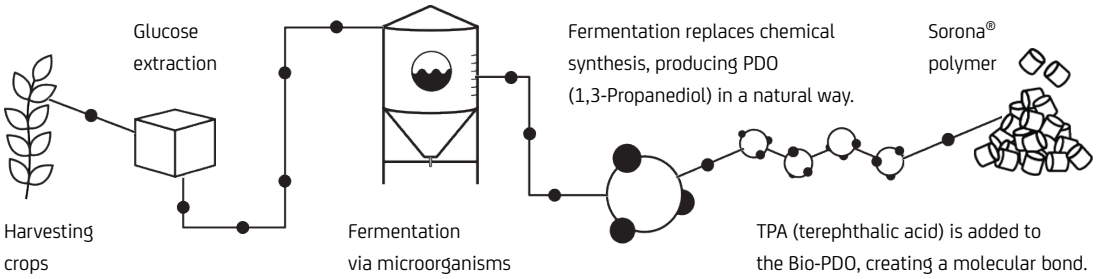
Berlin Tide AS

Sympatex creates laminates with bio-based SORONA® fibers from CovationBio™

What is Sorona®?

Sorona® is a renewably sourced plant-based fiber, which is also described as a bio-based polymer, with 37% renewable content by weight. The bio-based content comes from industrial dent corn from which glucose is extracted. Through the process of fermentation and by help of microorganisms, the glucose is converted into a chemical building block, called bio-PDO. Using this Bio-PDO in combination with the fossil-based chemical TPA, the result is a polyester fiber, namely Sorona® (source: https://sorona.com/our-story).



Why do we use Sorona®?

Sorona® is used for our 2&3 ply laminates as means to use partially bio-based fibers from renewable sources and furthermore to make use of the high-performance properties. According to CovationBio™ the manufacturing of Sorona® fibers requires 30% less energy and generates 63% less greenhouse gas emissions in comparison to the production of an equal amount of Nylon 6 fibers.

Besides the advantages in regard of sustainability, Sorona® fibers inherit a range of unique technical assets such as softness, high stretch & recovery, and wrinkle resistance. The high stretchability, resulting from the fibers unique molecular structure (a built-in spring-like fiber), make Sorona® fibers particularly suitable for extreme sporting activities.

Our laminate Berlin Tide is made with Sorona® fibers, out of the company's own category Sorona® Agile, containing 37 % Sorona® Polymers for a long-lasting stretch. The remaining percentage is conventional PES, and therefore this fabric can be categorized as Polyester. Furthermore, the Sorona® Agile hangtag can be used.

What else is important to know?

- **Is the use of corn for Sorona® in competition to the needs of the food industry?**
  Growing crops to produce bio-PDO seemingly competes with the cultivation of crops for the food industry. In reality though, the corn being used for Sorona® fibers is industrial dent corn, only grown for industrial purposes such as biofuel, industrial oil and the like. Therefore, it does not stand in competition with the food industry. Aditionally, it is important to highlight that less than 0.05% of land is used to grow feedstock for bio-based materials. Furthermore, the feedstock used to produce Sorona® is 100% grown by Truterra®, a completely regenerative agricultural program.
- **Is the corn GMO?**
  Yes, the industrial corn used in Sorona® fibers is GMO - as is most corn grown in the USA. However, ConvationBio™ states that within their production process there are no GM properties found in the monomer used to produce Sorona® fibers, and therefore the final product it is not GM.
- **Does Sorona® have an influence on the monomaterial recycling process?**
  Sorona® is a plant-based fiber which can be recycled with „conventional“ polyester textile waste streams. In this process, the Sorona® fibers melt together with the other PES-based fibers, like PET or our polyester-based membrane.

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More about SORONA