

## NEWS RELEASE

### **Teijin Frontier Develops a Next-Generation Stretch Fabric with an Extremely Fine, Multiple Crimp Structure Providing Soft and Airy Comfort**

**Tokyo, June 12, 2025** --- [Teijin Frontier Co., Ltd.](#), announced today that it has developed a next-generation stretch fabric made of an extra-fine three-dimensional structure with randomly sized crimps. The newly developed fabric combines exceptional elasticity with a soft, airy texture and a natural uneven surface that helps make the fabric lightweight while providing quick drying and moisture wicking performance.

Teijin Frontier plans to launch this next-generation stretch fabric for the domestic and international outdoor and sportswear markets during the Fall/Winter 2026 season. The company also aims to expand its applications to include lifestyle apparel such as innerwear and fashion garments, targeting sales of 100,000 meters in fiscal 2026 and 1 million meters by fiscal 2029.

Traditionally, stretch fabrics used in sportswear, fashion and innerwear have relied on polyurethane, however this material presents challenges in terms of strength, durability, weight and colorfastness. Previously, Teijin Frontier addressed these issues by developing various stretch materials using SOLOTEX<sup>®</sup> fiber, which is made from polytrimethylene terephthalate (PTT) instead.

In recent years, though, consumer demand has evolved beyond stretchability alone. Today there is growing interest in fabrics that offer novel textures and appearances, along with gentle-touch comfort. Existing SOLOTEX<sup>®</sup>-based materials provide numerous benefits, but were not fully meeting these new expectations from consumers.

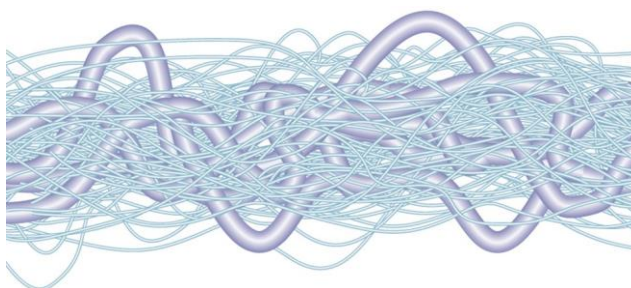
In response, Teijin Frontier leveraged its advanced PTT spinning and drawing technologies to develop an extra-fine side-by-side conjugate yarn that is produced by bonding two different PTT polymers in parallel. It features an extremely fine denier and strong, large crimp structure for excellent stretch performance. Using proprietary yarn processing techniques, this core yarn is combined with high-multifilament polyester fibers to create a sheath-core composite yarn with randomly sized crimps. When woven into a high-density textile, the result is a fabric with a natural, finely textured surface that delivers a light, airy texture and a soft feel—culminating in the creation of Teijin Frontier's next-generation stretch fabric.

**This next-generation stretch fabric offers the following key features:**

- **Innovative Texture and Appearance:** The contrast in crimp structures between the core and sheath yarns creates a natural, uneven surface with moderate firmness and drape.
- **Superior Comfort:** The combination of multiple crimp structures provides a soft, airy sensation that feels almost weightless. The fabric also offers excellent moisture absorption and quick-drying properties, and its fine and uneven surface helps prevent stickiness during perspiration.
- **Environmental Consideration:** The core yarn includes plant-derived raw materials, and the sheath yarn uses recycled polyester, making the next-generation stretch fabric an environmentally sustainable material.



**The surface of the newly developed fabric**



**A sheath-core composite yarn with randomly sized crimps.**

**About the Teijin Group**

**Teijin** (TSE: 3401) is a technology-driven global group with two core businesses: high-performance materials and healthcare solutions. Established in 1918 as Japan's first rayon manufacturer, Teijin today comprises some 170 companies employing 20,000 people in 20 countries. Teijin is committed to its Purpose, "Pioneering solutions together for a healthy planet." Teijin works together with employees and external partners to achieve its Long-Term Vision, "To be a company that supports the society of the future." Teijin posted consolidated revenue of JPY 1,005.5 billion and total assets of JPY 1,061.3 billion in the fiscal year ending March 31, 2025.

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