

NEWS RELEASE**Teijin Frontier Develops a New High-performance Polyester Fabric with a Natural Fiber-like Texture and Appearance**

Tokyo, May 19, 2025 --- [Teijin Frontier Co., Ltd.](#), announced today that it has developed a new high-performance polyester fabric, which combines the elegant appearance and texture of natural fibers made of yarns of random thickness with advanced functionalities such as cool touch, anti-stickiness, quick dry, opacity and ultraviolet (UV) protection. The newly developed fabric is produced from a unique, four-lobed, flat cross-section yarn with random thicknesses, achieved through Teijin Frontier's proprietary spinning technology. These thickness variations create pleasing irregularities in appearance and a dense texture similar to those of natural fibers. To support circularity, The newly developed fabric is made with 100 percent recycled polyester.

Teijin Frontier plans to make this fabric available to customers for use in casual and fashion apparel for the spring/summer 2026 season.

Combining Aesthetics and Functionality

There is strong demand for textiles that offer a natural and elegant appearance for casual and fashion apparel. At the same time, consumers are looking for value-added comfort features like those found in high-performance sportswear. Until now, it has been difficult to combine these high-performance features with a natural fiber-like appearance and texture.



New developed fabric

To solve this issue, Teijin Frontier has created a fabric that offers both the appearance and texture of natural fibers and the comfort of high-performance materials. Using proprietary technology, this fabric is woven or knitted from a four-lobed, flat cross-section full dull yarn with random thicknesses in both the longitudinal and cross-sectional directions. Moreover, to achieve the combination of natural fiber like texture and advanced functionalities, Teijin Frontier also adopts special dyeing and finishing technology and post-processing techniques.

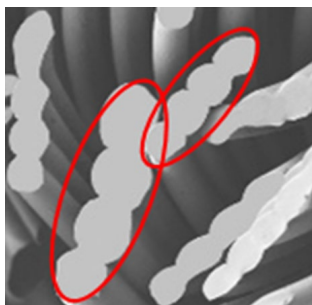
Delivering High Performance

The newly developed fabric delivers the following performance properties to enhance comfort and wearability:

- Quick dry: Capillary action wicks away perspiration via grooves on the fiber surface.
- Cool touch: Full dull yarn contains titanium oxide promotes a cooling sensation as heat is transferred from the skin to the fiber, flat cross-sectional shape increases the skin contact area.

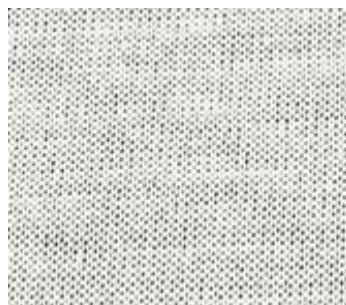
- Anti-stickiness: Random thicknesses of the yarn forms irregularities on the surface of the fabric and prevents its adherence to the skin.
- Anti-transparency and UV protection: Full dull yarn and the four-lobed flat cross-sectional structure produce a light-scattering effect that creates opacity and helps to block UV radiation.

Teijin Frontier plans to begin sales of this fabric from fiscal year 2025 and aims to sell 250,000 meters by fiscal year 2027.



Cross-sectional view

Thick and thin areas are randomly distributed in the lengthwise and cross-sectional directions.



The surface

New developed fabric provides a natural fiber-like appearance and texture.

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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