

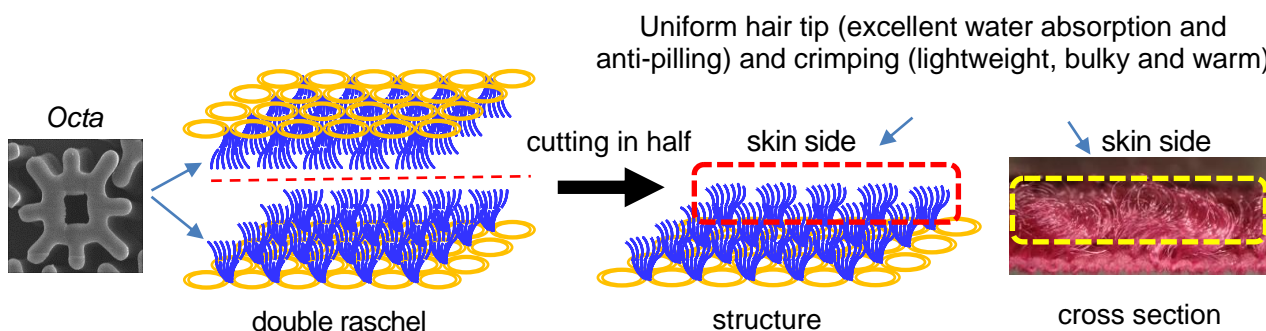
NEWS RELEASE

Teijin Frontier Develops Next-generation Heat Insulating Structure

Tokyo, Japan, August 3, 2020 --- [Teijin Frontier Co., Ltd.](#), the [Teijin Group's](#) fibers and products converting company, announced today its new heat insulating structure which combines sweat absorption and quick drying for innerwear and heat insulation for brushed-finish intermediate wear, or middler, worn between the inner and outer layers to retain heat. Teijin Frontier is positioning this new structure as a key material for outdoor wear in fall and winter 2021 collections. Eventually, applications of the new structure will include outdoor, sports, casual and uniform applications, targeting annual sales of one million meters in fiscal 2025.



The new structure offers a new type of bulky plush structure that does not brush. It is a double raschel knitted fabric cut in half with high precision. Its middle nodes are made with *Octa*, Teijin Frontier's highly modified hollow-core fiber with eight projecting fins aligned in a radial pattern. It also uses a distinct dyeing technology to maximize *Octa's* crimping function and stabilize its high-quality plush structure. Unprecedented comfort is enhanced with heat insulation (lightweight bulkiness and warmth) and yarn tips on the skin side that evenly absorb sweat and dry quickly.



Key Features of the new structure

Function/Feature		Content
Wear comfort	Lightweight and heat insulating	New bulky plush structure that does not brush. High-insulation dead air achieved with unique, highly modified cross section and crimping structure.
	Warmth	Comfortable warmth enabled by <i>Octa's</i> crimping yarn tips.
	Absorbent and quick drying	Prevents stickiness and cold sweat with excellent water absorption and quick drying enabled by <i>Octa's</i> eight projections.
Eco friendly	Wash and wear durability	No pilling even after long-term wear and washing.
	Eco friendly	100% recycled polyester material can be used. Using filament and preventing yarn brushing to suppress microplastic discharge.

Outdoor wear warmth is determined by outer, middler and inner garments which are added or excluded by the wearer in accordance with expectations regarding level of activity and usage environment. However, the expanding everyday use of outdoor wear has raised the demand for single layers offering two-layer functionality, in particular, a compact layer with both middler and inner functions. Whereas brushing yarn is mainly used to achieve heat insulation in middler, the inner layer typically requires sweat-absorption and quick-drying functions. Until now, however, it has not been possible to combine middler and inner functions because uneven surface caused by brushing yarn decreases sweat-absorption and quick-drying function.

About the Teijin Group

Teijin (TSE: 3401) is a technology-driven global group offering advanced solutions in the fields of environmental value; safety, security and disaster mitigation; and demographic change and increased health consciousness. Originally established as Japan's first rayon manufacturer in 1918, Teijin has evolved into a unique enterprise encompassing three core business domains: high-performance materials including aramid, carbon fibers and composites, and also resin and plastic processing, films, polyester fibers and products converting; healthcare including pharmaceuticals and home healthcare equipment for bone/joint, respiratory and cardiovascular/metabolic diseases, nursing care and pre-symptomatic healthcare; and IT including B2B solutions for medical, corporate and public systems as well as packaged software and B2C online services for

digital entertainment. Deeply committed to its stakeholders, as expressed in the brand statement “Human Chemistry, Human Solutions”, Teijin aims to be a company that supports the society of the future. The group comprises more than 170 companies and employs some 20,000 people across 20 countries worldwide. Teijin posted consolidated sales of JPY 853.7 billion (USD 8.0 billion) and total assets of JPY 1,004.2 billion (USD 9.4 billion) in the fiscal year that ended on March 31, 2020.

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