

NEWS RELEASE**Teijin Frontier Announces Global Availability of Biodegradable
BIOFRONT[®] PLA Resin**

Tokyo, October 29, 2024 — [Teijin Frontier Co., Ltd.](#), today announced the global availability of its *BIOFRONT*[®] polylactic acid (PLA) resin, which biodegrades faster in oceans, rivers and soil compared to conventional PLA products. Incorporation of a novel biodegradation accelerator in the polymer can enhance its decomposition rate without significantly compromising strength, crystallinity or moldability. This resin, named to signify cutting-edge biotechnology, is now fully commercialized in Japan and internationally.

BIOFRONT[®] resin aligns with Teijin Frontier's *THINK ECO*[®] environmental strategy and joins the company's wide range of sustainable materials and products. Teijin Frontier plans to continue developing biodegradable materials to help reduce the environmental impact of plastics.

Features and benefits of *BIOFRONT*[®] resin

The resin's biodegradation accelerator promotes hydrolysis and speeds up material consumption and decomposition by bacteria and fungi compared to PLA polymers without additives. *BIOFRONT*[®] resin exhibits rapid biodegradation performance even in marine, riverine and soil environments, where there are fewer bacteria and fungi than in high-temperature, high-humidity composting systems. Further, the decomposition period can be controlled by adjusting the loading and incorporation parameters of the accelerator. Accordingly, the decomposition period can be adjusted to the required lifetime.

Another advantage of *BIOFRONT*[®] resin is its ability to be processed like conventional PLA polymer resins used in films and injection-molded and extruded products. It can also be used for fibers in textiles and non-woven fabrics.

From the standpoint of sustainability, *BIOFRONT*[®] PLA resin is expected to help reduce microplastics, thanks to its accelerated biodegradation rate, and to reduce CO₂ emissions during the product lifecycle since it is made from plant-derived raw materials.



BIOFRONT[®] resin pellets

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. Through "Human Chemistry, Human Solutions," Teijin relentlessly strives to be a company that supports the society of the future by protecting the global environment and addressing the needs of people and communities. Teijin posted consolidated sales of JPY 1,032.8 billion (USD 6.6 billion) and total assets of JPY 1,251.0 billion (USD 8.0 billion) in the fiscal year ending March 31, 2024.

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