



Using natural biological resources as raw materials, screening new underlying monomer molecules, combining technology and process innovation, to create products that enhance consumer experience and enrich human life.



Bio-based



Eco-Friendly



Circular Recycling

Born From Nature

A 100% biobased polymer:
Core materials include cellulose, crop straw, recycled cotton—no reliance on petroleum extraction or refining.

Refined By Innovation

A revolutionary molecular structure:
Built on a new high-performance polymer framework using FDCA (2,5-furandicarboxylic acid), a novel bio-based monomer.

Elevated In Experience

A new dimension of pleasure:
Softer wear for ultimate comfort, fresher taste for culinary delight, richer aroma for sensory elevation—crafting life's textures with nature's power.

LEAF PEF Bottle Pellets

Ushering in a New Era of Biobased Packaging



Barrier Performance



Mono-Material



Machinable

LEAF PEF	Tg	Tm
Indicators	88°C	210°C
CO ₂ Barrier (@23 C, 65% RH)	O ₂ Barrier (@23 C, 65% RH)	H ₂ O Barrier Properties (@38 C, 90% RH)
20x PET	6-12x PET	2.5x PET



LEAF PEF

Features excellent barrier, heat resistance, and environmental properties.

Barrier performance:

Compared with petroleum-based polyester PET,
- CO₂ barrier performance is 20x that of PET
- O₂ barrier performance is 6-12x that of PET
- H₂O barrier performance is 2.5x that of PET

Heat resistance:

Glass transition temperature is 12°C higher than PET, compatible with high-temperature filling and pasteurization scenarios

Environmental benefits:

- Reduced processing energy consumption (melting point reduced by ~40°C)
- Compatible with existing PET recycling systems

High Performance Single-material solution: LEAF PEF comprehensively addresses diverse packaging applications, providing dual assurance for product quality and sustainable future through its superior performance.

BioFleax™ Fibers

Nature-Woven Green Textures



Moisture-Wicking
Quick-Drying



Comfortable and
Skin-Friendly



Intrinsic UV
Protection



Natural
Antibacterial

BioFleax™	Tg	Tm	Moisture Regain	Biobased Content
Indicators	88°C	210°C	>1%	73-100%

Staphylococcus Aureus	Klebsiella Pneumoniae	Candida Albicans	Dye Types	Fiber Specifications
>80%	>90%	>80%	Disperse, Cationic	Communication

*Bacteriostatic rate: Non-dissolving bacteriostatic rate *Testing standards: ATCC10231, ATCC25922, ATCC6538.



BioFleax™

Outperforms PET in wearing comfort, athletic performance, intrinsic sun protection, and natural antibacterial properties.

Moisture Wicking & Quick Drying:

- Moisture regain 3-5 times that of PET
- Drying rate increased by 60%

Natural Antibacterial Performance:

Without adding metal ions and chemical additives, Biofleax™ has strong natural antibacterial properties.



BioFleax™ fiber is a revolutionary 100% bio-based polyester. Using natural plants as raw materials, it brings environmental-friendliness and comfort to the fiber. With a brand-new structural breakthrough, it endows the fiber with excellent performance. By combining nature and technology, it enhances consumers' wearing experience in scenarios such as sports, fashion, and home life.



Born from nature's bounty, transcending traditional boundaries, weaving into every corner of your life—from daily essentials to fashion trends.

Choose LEAF

Join hands with nature and embark on a journey of sustainable, quality living!

Leaf Bio Online Customer Service



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