

## A CIRCULAR FUTURE STARTS HERE

Sustainability is no longer optional, it's essential. releaf® PEF enables brands to meet ambitious carbon reduction goals without compromising on quality or aesthetics. Partner with Avantium to transform your packaging portfolio with materials that honor both planet and prestige.

Join the movement toward regenerative luxury at Luxe Pack.

- Visit us at Booth D01
- Discover the PEF difference



ÉDITION  
SPÉCIALE  
BY LUXE PACK

JUNE  
17 & 18  
2026

Preserving Cosmetic Integrity through

# Advanced Material Innovation


Plant-Based PEF for Luxury Packaging



## GET IN TOUCH

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 **releaf**  
Made by Avantium

## Why Choose releaf<sup>®</sup>

Born from plants, engineered for performance. releaf<sup>®</sup> PEF (polyethylene furanoate) is a 100% plant-based polymer that delivers superior barrier properties while reducing your carbon footprint by up to 71% (at resin level) compared to conventional PET.

## Cosmetic Integrity, Elevated

You need materials that protect as beautifully as they present. releaf<sup>®</sup> PEF's advanced barrier technology preserves fragrance complexity, prevents oxidation, and maintains formula efficacy, ensuring your product performs exactly as intended from first use to last.

## Injection Molding releaf<sup>®</sup>

releaf<sup>®</sup> enables high design freedom, allowing complex geometries and thick, clear parts thanks to its slow crystallization, as well as colored parts when required. It delivers stable cycle times on standard equipment, with low shrinkage for precise replication and consistent quality. releaf<sup>®</sup> also supports a wide range of decoration techniques, including metallization, hot stamping, serigraphy, laser engraving, embossing, and more.



### Bottles, containers & droppers

- Manufactured using IM, IBM and ISBM (1-step and 2-step), supporting a wide range of cosmetic formats including skincare, serums, droppers and liquid make-up containers (<100ml)



### Plant-based

- Circular by design: renewable, reusable, responsible
- Lower Carbon Footprint



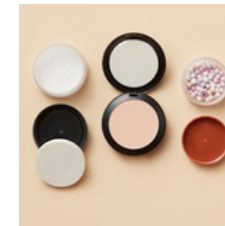
### Compatible with existing PET recycling lines

- RecyClass validated Avantium's PET/PEF multilayer bottle as fully recyclable in the PET stream
- Critical Guidance Protocol from the APR
- EPBP interim endorsement for PET recycling



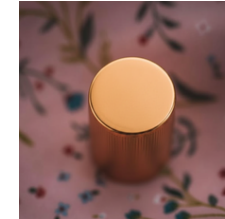
### High -Performance

- Intrinsic barrier → monomaterial solutions
- Locks in cosmetic integrity and formula stability
- High stiffness → supports premium rigid formats
- Light weighting potential, ultralux=ultralight
- Compatible with multiple formulas



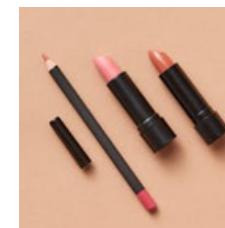
### Compacts

- Powder cases (foundation, blush, eyeshadow palettes)
- Multi-part assemblies: base, lid, grids, hinges, push buttons



### Caps & decorative closures

- Caps for perfume bottles
- Overcaps/luxury closures



### Lipstick & mascara components

- Caps, overcaps
- Decorative outer parts/ shells
- Rings, collars, inner mechanisms



### Jars

- Skincare jars (creams, balms, masks).
- Thick-wall premium jars (single and double wall)
- Multi-part assemblies (inner/outer jars, lids)



## About

### Renewable chemistry, made commercial.

Avantium develops plant-based material solutions that help replace fossil-based resources with lower-carbon alternatives. At the center of this innovation is the world's first commercial FDCA Flagship Plant in Delfzijl, The Netherlands, where plant-based chemistry is transformed into the key building block for Releaf<sup>®</sup> PEF.

Releaf<sup>®</sup> PEF is a plant-based, recyclable polymer designed for high-performance packaging. It offers a lower carbon footprint, excellent barrier properties, and the ability to help protect sensitive formulas, fragrances, and premium product quality.



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[www.avantium.com](http://www.avantium.com)