PEF, a next generation packaging material

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Poly(ethylene 2,5-furanoate) (PEF) has garnered significant attention due to its environmentally friendly production process, higher glass transition temperature (Tg), impressive mechanical performance, and outstanding barrier properties. These attributes position PEF as a next-generation packaging material.

In October 2024, the world's first FDCA (furandicarboxylic acid) flagship plant was inaugurated in Delfzijl, the Netherlands, marking a major milestone in the commercial production of PEF. Additionally, the brand name Releaf was introduced last year, further establishing PEF's presence in the market.

This presentation will delve into the unique packaging solutions enabled by PEF, highlighting its superior barrier properties against gases like CO2 and O2, which extend the shelf life of packaged products. The discussion will cover the current status of PEF production ramp-up, its properties, potential applications, and end-of-life scenarios.

Attendees will gain a comprehensive understanding of how PEF can meet their specific needs, from food and beverage packaging as well as textiles. The presentation aims to provide insights into the sustainable potential of PEF and its role in advancing greener packaging solutions.