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Polyethylene Furanoate: A promising biobased polyester for barrier applications

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Poly(ethylene furanoate) – PEF has gained extensive attention in recent years due to its high barrier properties to oxygen and carbon dioxide. PEF is a biobased polyester polymerized through combination of 2,5-furandicarboxylic acid – FDCA and ethylene glycol. Many authors consider PEF a potential replacement to PET and the next generation of FDCA biobased polyesters. The successful introduction of PEF in the beverage and food packaging industry requires bringing concrete proof of its applicability and versatility as a barrier layer, combining the fundamental understanding