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Graphical Abstract

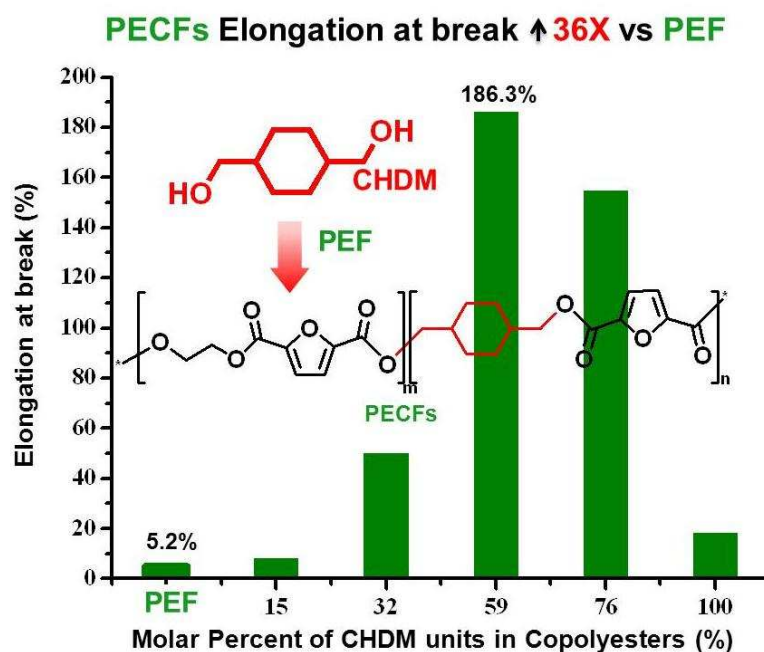
Modification of Poly(ethylene 2,5-furandicarboxylate) with 1,4-Cyclohexanedimethylene: Influence of Composition on Mechanical and Barrier Properties

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A series of bio-based polyesters (PECFs) in full composition range were synthesized from CHDM, EG and FDCA. Considering the crystallization ability and toughness as well as O₂/CO₂ permeability of PECFs, the copolyesters PECF-76 might be the promising substitute for PET in packaging industry.

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