

Green Dot Bioplastics Achieves a Compostable Living Hinge

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Green Dot Bioplastics, a leading developer and supplier of bioplastic materials for innovative, sustainable end-uses, announces the compostable living hinge.

Creating fully-compostable packaging has stymied developers because of one component: the living hinge. Living hinges are a type of hinge made from an extension of the parent material, acting as a connection between two larger plastic sections, such as on a bottle of sunscreen. Typically the larger plastic pieces and the living hinge are made of one continuous piece of plastic.

Because a living hinge must be very thin, flexible, and withstand repeated usage without

breaking, typically manufacturers have used polypropylene to create the entire unit.

Until now.

Green Dot is proud to announce that the new, expanded Terratek® BD line of compostable resins includes materials with the same malleability and durability as materials traditionally used to manufacture living hinges. Two new injection molding grades deliver higher heat performance and enhanced processability (lower cycle times) for caps/closures, food service ware, and takeout containers with a higher rate of biodegradability and the functional performance that the market demands.

"During the application development process, we worked with a customer to commercially develop a living hinge for an injection molded package," said Mike Parker, Director of Research & Development, Green Dot Bioplastics. "It was highly successful, resulting in a package made entirely from Terratek® BD compostable resins. Developing a solution to the living hinge challenge opens a lot of doors for sustainable packaging."

The injection molding grades are currently undergoing certification by TUV Austria.

About Green Dot Bioplastics, Inc.

Green Dot Bioplastics, Inc is a bioscience social enterprise headquartered in Emporia, Kansas. Celebrating a decade of sustainability, Green Dot is a full-service bioplastics company dedicated to delivering the very best of sustainable materials to our customers. That's the thinking behind our Terratek® line of bioplastics, developed to meet the growing demand for biobased and compostable materials with fewer of the drawbacks associated with traditional plastics. Learn more at https://greendotbioplastics.com.



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