

Terratek® Flex

GDH-B1FA

U.S. Patent No. 9,023,918

Product Description

Terratek® GDH-B1FA is a unique elastomeric bioplastic with a diverse range of potential applications. The bioplastic is verified to meet U.S. (ASTM D6400-04) and E.U. (EN13432) standards for compostability.

Sustainability Guide	
Biobased content ASTM 6866	16%
Biobased content by weight	35%
Recycled content	0%
Energy use	4.21 Mj/kg
Compostable	yes

Applications

This material is suitable for injection molding, profile extrusion, sheet extrusion, blow molding, and blown film.

Property	Test Method	Value
Specific Gravity	ISO 1183-1	1.23
Hardness	ISO 868	74 Shore A
Tensile Strength (Ultimate)	ISO 37	9.4 MPa
Elastic Modulus	ISO 37	4.4 MPa
Elongation at Break	ISO 37	>600%
Tear Strength	ISO 34-1	57 N/mm
MFI @ 190° C/2.2kg	ISO 1133	57 g/10min
Compress Set, 22 hrs @ 23°C	ISO 815/ASTM D395(B)	33%
Compress Set, 22 hrs @ 70°C	ISO 815/ASTM D395(B)	82%
Melt Flow		29.1 g/10 min
Shrink Rate	ASTM D955	flow direction .005 in/in trans flow direction .001 in

General Processing Recommendations

Drying: Resin must be dried before processing.

Drying Conditions: Out of a sealed box: 90° to 100° F for 2 to 3 hours
Open box: 100° to 120° F for 4 to 5 hours

Suggested Temperature Settings:

Extruder Zone	Rear	Center	Front	Nozzle
Temperature °F	280° - 330°	280° - 330°	280° - 330°	280° - 330°

Processing at temperatures above 350° F and in combination with high shear conditions such as high injection speed may result in thermal degradation of this resin.

Specific recommendation for processing GDH-B1FA can be made based on customer equipment and processes. For further suggestions, please contact Green Dot.

Packaging and Storing

Terratek® GDH-B1FA resin is typically packaged in a sealed plastic-lined fiber drum of 250 lbs. The product should be stored in a cool, dry, and sanitary area to achieve maximum stability.

The information and recommendations in this sheet are based on our experience and analysis using standard procedures, and are believed to be accurate and reliable. However, they serve merely as typical guides, and are presented in good faith for the benefit of our customers. No guarantee, expressed or implied, is made regarding accuracy of the analysis, patent infringement, liabilities, or risks involved from the application of our products.	Issued:	4/2011
	Revised:	8/7/20
	Approved:	R&D/QC