

# Terratek <sup>®</sup> TECHNICAL DATA

## Product Terratek® FX1515 Blown Film

**Product Description** Proprietary blend of natural and synthetic biodegradable polyesters suitable for blown and cast film. FX1515 is heat sealable, provides contact clarity, and can function as a tie layer; it also works well as an impact modifier for PLA given its elastomeric properties. This resin has passed ASTM D6400 at 4 mil thickness.

Property	Test Method	Value
Film Thickness (Average)		2 mil
Specific Gravity	ASTM D792	1.22
Melt Index (190°C /2.16 kg)	ASTM D1238	14 g/10 min
Tensile Strength MD (at Max)	ASTM D882	2,434 psi
Tensile Strength TD (at Max)	ASTM D882	2,567 psi
Elongation MD (at Max)	ASTM D882	787%
Elongation TD (at Max)	ASTM D882	769%
Dart Drop (f-50)	ASTM D1709, A	562 gf
OTR (23°C / 0% RH)	ASTM D3985	299 cc/ (100 in <sup>2</sup> -day atm)
WVTR (37.8°C / 90% RH)	ASTM F1249	51.0 g/ (100 in <sup>2</sup> -day atm)
Elmendorf Tear- MD (pendulum	ASTM D1922	217 g
800g)		
Elmendorf Tear- TD (pendulum	ASTM D1922	260 g
800g)		

#### **Drying Conditions**

Moisture level: at or below 0.04% (400 ppm)

Method: Karl Fischer; if using a loss in weight analyzer, contact Green Dot for more information.

Drying conditions: Desiccant dryer 140°F for 2 to 4 hours or until the recommended moisture level is reached

ATTENTION: Moisture in Terratek<sup>®</sup> BD resins may result in hydrolysis which can cause brittleness, loss in strength, and reduction in melt strength, in addition to potentially impacting the shelf life of finished parts and films.

#### **Packaging and Storing**

This resin is typically packaged in a sealed plastic or foil lined box, drum, or gaylord. The product should be stored in a cool, dry, and sanitary area to achieve maximum stability.

#### **Extrusion Recommendations**

Terratek<sup>®</sup> resins can be processed on conventional extrusion equipment. Follow standard purging process with a polyolefin or purge compound, such as Dyna-Purge, etc. Melt temperature of the resin should remain below 400°F.

Feed Zone	280°F to 320°F
Middle Zones	320°F to 360°F
Front Zones	320°F to 360°F
Die Zone	320°F to 360°F
Chill Rolls	40°F to 80°F

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

### **Renewable Content**

Biobased content (ASTM D6866)	20%
Biomass content (by weight)	25%