

# Terratek \* TECHNICAL DATA

## Product Terratek® FX1504

**Product Description** Proprietary blend of natural and synthetic biodegradable polyesters suitable for sheet extrusion and 3D printer filament. This resin is made from polymers which pass industry standards for Industrial composting.

Renewable Content		
Biobased content (ASTM D6866)	20%	
Biomass content (by weight)	20%	

Property	Test Method	Value
Specific Gravity	ASTM D792	1.23
Shrinkage	ASTM D955	0.0095 in/in
Melt Index (190°C / 2.16 kg)	ASTM D1238	9.0 g/10 min
Tensile Strength	ASTM D638	1,873 psi
Tensile Modulus	ASTM D638	16,097 psi
Elongation	ASTM D638	>400%
Notched Izod Impact	ASTM D256	6.06 ft-lb/in
Flexural Strength	ASTM D790	762 psi
Flexural Modulus	ASTM D790	16,097 psi

## **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® FX 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.

## **Processing Recommendations**

Terratek® resins can be processed on conventional plastics equipment. Follow standard purging process with a polyolefin or purge compound, such as Dyna-Purge, etc. Melt temperature of the resin should remain below 350°F.

### **Extrusion Recommendations**

Feed Zone	270°F to 300°F
Middle Zones	290°F to 320°F
Front Zones	300°F to 330°F
Die Zones	300°F to 330°F
Chill Rolls	40°F to 80°F

## **Molding Recommendations**

Feed Zone	250°F to 300°F
Middle Zones	290°F to 320°F
Front Zones	300°F to 340°F
Nozzle/Die	300°F to 340°F
Mold	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