

# Terratek \* TECHNICAL DATA

## Product Terratek® SC50

**Product Description** This resin is a combination of wheat starch and injection molding grade polypropylene (PP). It is certified by the USDA BioPreferred Program for biobased content.

Renewable Content		
Biobased content (ASTM D6866)	36%	
Biomass content (by weight)	50%	

Property	Test Method	Value
Specific Gravity	ASTM D792	1.09
Shrinkage	ASTM D955	0.011 in/in
Melt Index (230°C / 2.16 kg)	ASTM D1238	31 g/10 min
Tensile Strength	ASTM D638	4,174 psi
Tensile Modulus	ASTM D638	375,826 psi
Elongation	ASTM D638	2.17%
Notched Izod Impact	ASTM D256	0.44 ft-lb/in
Flexural Strength	ASTM D790	7,893 psi
Flexural Modulus	ASTM D790	330,592 psi

#### **Drying Conditions**

Moisture level: at or below 0.25% (2500 ppm)

Method: as measured by a loss in weight analyzer 270°F for 15

minutes

Drying conditions: Desiccant dryer 150°F until the recommended

moisture level is reached

ATTENTION: Moisture in Terratek® WC resins may result in splay, drool at the nozzle, foaming or other processing concerns.

#### **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.



### **Molding Recommendations**

Terratek® resins can be processed on conventional molding 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. If thermal degradation occurs, the operator will see dark streaks in the parts or purge, off-gassing, and drool at the nozzle or in the mold.

Feed Zone	300°F to 360°F
Middle Zones	330°F to 360°F
Front Zones	360°F to 380°F
Nozzle/Die	360°F to 380°F
Mold	40°F to 100°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