


Code	PRO_TDS_25	PRO TECHNICAL DATA SHEET TDS	
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SECTION 1: PRODUCT DESCRIPTION

FC 50010 is made with Earth Renewable Technologies bio-based package developed for 3D printing monofilament.

SECTION 2: PHYSICAL PROPERTIES & GUIDELINES FOR USE


FC 50010 is supplied as off-white pellets. Temperatures during transportation and storage may not exceed 50°C. Storage time of unopened bags may not surpass 24 months at room temperature. Drying prior to processing is essential. A moisture content less degradation. The property values listed below should be viewed as guidelines only and may vary based on processing conditions. No warranties of any kind, either expressed or implied are made regarding products described or regarding designs, data or information set forth. Process temperatures must not exceed 230°C. To achieve high Heat Deflection Temperatures, hot molding or annealing of the part is required.

Drying: dry the material for 4 – 6 hours at 100°C.

	Settings, °F*	Settings, °C*
Feed Throat	70	21
Feed Section	311-347	155-175
Zone 1	356-428	180-220
Zone 2	356-428	180-220
Zone 3	356-428	180-220
Zone 4	356-428	180-220
Hot Runner	374-428	190-220
Nozzle	374-428	190-220
Hot Mold Set up	194-212	90-100

*These settings are intended as a starting point. Optimization may be required

Physical Properties*	Test Method	Value
Melt Flow Rate (190°C, 2.16 kg)	ISO 1133-A	9 - 11 g/10 min

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Mechanical Properties*	Test Method	Value
Tensile strength (MPa)	ASTM D638	66
Elongation at break (%)	ASTM D638	10
Notched Izod Impact Resistance (J/m)	ASTM D256	50
HDT (°C)	ASTM D648	60

*Data properties measured on injection molded bars.

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