



FC 10570 Technical Data Sheet

PLA Compounds for injection molding

FC 10570 is made with Earth Renewable Technologies bio-based microfiber-additive package developed for manufacturing injection molding products.

Physical Properties & Guidelines for Use

FC 10570 is supplied as off-white pellets. Temperatures during transportation and storage may not exceed 80°C. Storage time of unopened bags may not surpass 12 months at room temperature. Drying prior to processing is essential. A moisture content less than 100 ppm is recommended to prevent viscosity 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. In order to achieve high Heat Deflection Temperatures, hot molding or annealing of the part is required. Drying: dry the material for 4 hours at 80°C.

	Settings, °F*	Settings, °C*
Feed Throat	70	21
Feed Section	350-375	177-191
Zone 1	375-395	191-200
Zone 2	375-395	191-200
Zone 3	375-395	191-200
Zone 4	375-395	191-200
Hot Runner	375-395	191-200
Nozzle	395-410	200-210
Cold Mold Set up	80-90	27-32
Hot Mold Set up	212-230	100-110

*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)	ASTM D1238:2013	29 - 31 g/10 min
Molding Shrinkage	ASTM D955	Axial: 0.5%
		Lateral: 2.0%
		Axial: 2.5%*
		Lateral: 2.9%*
Mechanical Properties*		
	Test Method	Value
Tensile Strength at Break	ASTM D638:2014	45 MPa
		41 MPa*
Elongation	ASTM D638:2014	37%
		21%*
Flexural Modulus	ASTM D790:2017	2930 MPa
		2520 MPa*
Notched Izod Impact Strength	ASTM D256:10(2018)	30 J/m
		50 J/m*
HDT (before crystallization)	ISO 75-1/-2	55°C
HDT (after crystallization)	ISO 75-1/-2	140°C*

*Data obtained from hot molded ASTM standard test bars. Results obtained at 100% add in.

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