

## NatureWorks® Ingeo<sup>™</sup> 6400D Fiber Grade PLA

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Polylactic Acid (PLA) Biopolymer

## Material Notes:

NatureWorks® PLA polymer 6400D is a thermoplastic fiber-grade resin derived primarily from annually renewable resources. Available in pellet form, 6400D is designed for extrusion into mechanically drawn continuous filament using conventional fiber spinning and drawing equipment. 6400D is typically well suited for fiber that is processed into bulk continuous filament (BCF), which is typically used in the manufacturing of carpet. NatureWorks® PLA 6400D can be converted into BCF using a one step spin-draw process.Applications: Bulk continuous filament; Tufted carpet – loop pile; Tufted carpet – cut pile; Broad loom carpet; Carpet mats

## Order this product through the following link: http://www.lookpolymers.com/polymer\_NatureWorks-Ingeo-6400D-Fiber-Grade-PLA.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.24 g/cc	1.24 g/cc	ASTM D792
Melt Density	1.08 g/cc	0.0390 lb/in <sup>3</sup>	ASTM D1238
Ment Density	@Temperature 230 °C	@Temperature 446 °F	
Viscosity Measurement	4.0	4.0	Relative Viscosity; CD Internal Viscotek Method
Melt Flow	4.0 - 8.0 g/10 min	4.0 - 8.0 g/10 min	ASTM D1238
	@Load 2.16 kg, Temperature 210 °C	@Load 4.76 lb, Temperature 410 °F	

Mechanical Properties	Metric	English	Comments
Elongation at Break	35 - 45 %	35 - 45 %	Fiber; ASTM D2256/ASTM D3822
Tenacity	0.177 - 0.212 N/tex	2.00 - 2.40 g/denier	ASTM D2256/ASTM D3822

Thermal Properties	Metric	English	Comments
Melting Point	160 - 170 °C	320 - 338 °F	ASTM D3418
Glass Transition Temp, Tg	55.0 - 60.0 °C	131 - 140 °F	ASTM D3417
Shrinkage	15 - 20 %	15 - 20 %	Boiling Water, Bulk heat set; ASTM D2102
	25 - 35 %	25 - 35 %	Boiling Water, Bulk non-heat set; ASTM D2102

Pro	cessing Properties	Metric	English	Comments
Drying Temperature	80.0 °C	176 °F		
	@Time 14400 sec	@Time 4.00 hour		



Pow Point	-35.0 °C	-31 0 °F	Comments
Processing Properties	Metric	English	
Drying Air Flow Rate	>= 14.2 l/min	>= 0.500 ft³/min (CFM)	

## Contact Songhan Plastic Technology Co.,Ltd.

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