

NatureWorks® Ingeo™ 3801X Injection Grade PLA

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

Material Notes:

Ingeo™ 3801X is designed for injection molding applications that require high heat and high impact performance. This polymer grade has much more rapid crystallization kinetics than other NatureWorks® resins currently in the market place. The rapid crystallization rate allows for the molding of crystalline parts at competitive cycle times with high heat distortion temperatures. Ingeo™ 3801X is designed for injection molding applications where the property requirements are opaque molded parts with heat deflection temperatures between 150°F (65°C) and 285°F (140°C) that do not require food contact approvals.

Order this product through the following link:

http://www.lookpolymers.com/polymer_NatureWorks-Ingeo-3801X-Injection-Grade-PLA.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.33 g/cc	1.33 g/cc	ASTM D792
Viscosity Measurement	3.1	3.1	Relative Viscosity
Linear Mold Shrinkage	0.011 - 0.013 cm/cm	0.011 - 0.013 in/in	
Melt Flow	8.0 g/10 min @Load 2.16 kg, Temperature 190 °C	8.0 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	25.9 MPa	3760 psi	ASTM D638
Elongation at Break	8.1 %	8.1 %	ASTM D638
Izod Impact, Notched	1.44 J/cm	2.70 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Melting Point	160 - 170 °C	320 - 338 °F	ASTM D3418
Deflection Temperature at 0.46 MPa (66 psi)	65.0 °C	149 °F	ASTM E2092
Glass Transition Temp, Tg	45.0 °C	113 °F	ASTM D3417

Processing Properties	Metric	English	Comments
Feed Temperature	177 °C	351 °F	
Nozzle Temperature	188 °C	370 °F	
Melt Temperature	188 °C	370 °F	

Mold Temperature Processing Properties	85.0 - 105 °C Metric	185 - 221 °F English	Comments
Injection Velocity	50.8 - 203 mm/sec	2.00 - 8.00 in/sec	
Back Pressure	1.72 MPa	250 psi	
Screw Speed	125 rpm	125 rpm	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China