OnForce™ LFT NY-30LGF/000 HS NATURAL

Polyamide 6

Key Characteristics

Product Description
PolyOne's Long Fiber Thermoplastic (LFT) compounds are formulated for demanding applications which require high stiffness and good impact such as metal replacement or other structural applications. These products exhibit enhanced physical and mechanical properties versus standard short fiber products. Benefits of LFT compounds include improved impact strength, elastic modulus, and material strength across wide temperature ranges from subambient to highly elevated. Furthermore, LFT compounds have been shown to offer improved performance in the areas of creep and fatigue performance, improved dimensional stability, and exhibit an exceptional surface finish when compared to traditional highly filled short fiber products.

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Long Glass Fiber, 30% Filler by Weight		
Features	• Heat Stabilized		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.35 g/cm³	1.35 g/cm³	ISO 1183
Molding Shrinkage	0.20 %	0.20 %	ISO 294-4
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	1.21E+6 psi	8350 MPa	ISO 527-2
Tensile Stress (Break)	24700 psi	170 MPa	ISO 527-2
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2
Flexural Modulus	1.19E+6 psi	8200 MPa	ISO 178
Flexural Stress	37700 psi	260 MPa	ISO 178
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Charpy Notched Impact Strength	7.1 ft·lb/in²	15 kJ/m²	ISO 179
Charpy Unnotched Impact Strength	40 ft·lb/in²	85 kJ/m²	ISO 179
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	428 °F	220 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	500 to 536 °F	260 to 280 °C
Mold Temperature	194 °F	90.0 °C
Injection Rate	Slow-Moderate	Slow-Moderate
Back Pressure	725 psi	5.00 MPa

Notes

[1] Typical values are not to be construed as specifications.

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