OnForce™ LFT LFT PP-30 LGF/000 1001

Polypropylene Homopolymer

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		
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.12	1.12	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3 in/in	0.20 to 0.30 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	914000 psi	6300 MPa	ISO 527-2
Tensile Stress (Break)	16000 psi	110 MPa	ISO 527-2
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2
Flexural Modulus	885000 psi	6100 MPa	ISO 178
Flexural Stress	21000 psi	145 MPa	ISO 178
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact Strength (73°F (23°C))	10 ft·lb/in²	22 kJ/m²	ISO 180
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/A
264 psi (1.8 MPa), Unannealed	293 °F	145 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	185 °F	85 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	410 to 430 °F	210 to 221 °C
Mold Temperature	150 °F	66 °C

Notes

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