



LubriOne™ NL-30GF/15T Black Polyamide 612

Key Characteristics

Product Description

LubriOne™ Lubricated and Wear-Resistant Compounds have been specifically formulated to be self-lubricating materials, offering low coefficient of friction and improved wear resistance properties. LubriOne compounds have been demonstrated to reduce friction, noise, vibration, heat buildup and improve product durability.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Stiffness	• Lubricated	• Wear Resistant
Uses	• Appliance Components • Automotive Applications • Bearings • Business Equipment	• Consumer Applications • Conveyor Parts • Gears • Industrial Applications	• Printer Parts • Pulleys • Rollers
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.43	1.43	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3 in/in	0.20 to 0.40 %	ASTM D955
Molding Shrinkage - Across Flow	0.010 to 0.020 in/in	1.0 to 2.0 %	ASTM D955
Water Absorption (24 hr)	0.15 %	0.15 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.23E+6 psi	8450 MPa	ASTM D638
Tensile Strength (Yield)	16600 psi	114 MPa	ASTM D638
Tensile Strength ² (Break)	16600 psi	114 MPa	ASTM D638
Tensile Elongation ² (Break)	3.6 %	3.6 %	ASTM D638
Flexural Modulus	1.05E+6 psi	7240 MPa	ASTM D790
Flexural Strength	27700 psi	191 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.13	0.13	
vs. Steel - Static	0.18	0.18	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.250 in (6.35 mm), Injection Molded	1.5 ft·lb/in	80 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	414 °F	212 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	383 °F	195 °C	

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Thermal	Typical Value (English)	Typical Value (SI)	Test Method
CLTE - Flow	1.0E-5 in/in/°F	1.8E-5 cm/cm/°C	ISO 11359-2

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	180 °F	82.2 °C
Drying Time	4.0 to 5.0 hr	4.0 to 5.0 hr
Suggested Max Moisture	0.20 %	0.20 %
Rear Temperature	430 to 470 °F	221 to 243 °C
Middle Temperature	440 to 480 °F	227 to 249 °C
Front Temperature	450 to 490 °F	232 to 254 °C
Nozzle Temperature	460 to 500 °F	238 to 260 °C
Mold Temperature	100 to 200 °F	37.8 to 93.3 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

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