



LubriOne™ NL-30CF/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	• Electrically Conductive • 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	1.33	1.33	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 0.010 in/in	0.20 to 1.0 %	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	2.80E+6 psi	19300 MPa	ASTM D638
Tensile Strength (Yield)	24500 psi	169 MPa	ASTM D638
Tensile Strength ² (Break)	24500 psi	169 MPa	ASTM D638
Tensile Elongation ² (Break)	2.9 %	2.9 %	ASTM D638
Flexural Modulus	2.10E+6 psi	14500 MPa	ASTM D790
Flexural Strength	39000 psi	269 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.14	0.14	
vs. Steel - Static	0.26	0.26	
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	1.9 ft-lb/in	100 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)	388 °F	198 °C	

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Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+2 to 1.0E+3 ohms	1.0E+2 to 1.0E+3 ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+3 ohms·cm	1.0E+2 to 1.0E+3 ohms·cm	ASTM D257

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)

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314



Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe

6 Giällewee
+352 269 050 35

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