



LubriOne™ SF-30CF/15T

Polyphenylene Sulfide

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 • Good Chemical Resistance • Good Wear Resistance	• High Heat Resistance • High Rigidity • Linear Polymer Structure	• Lubricated • Semi Crystalline
Uses	• Appliance Components • Automotive Applications • Bearings • Business Equipment	• Consumer Applications • Conveyor Parts • Gears • Industrial Applications	• Printer Parts • Pulleys • Rollers
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.52	1.52	ASTM D792
Molding Shrinkage - Flow	2.0E-4 to 4.0E-4 in/in	0.020 to 0.040 %	ASTM D955
Molding Shrinkage - Across Flow	0.010 to 0.030 in/in	1.0 to 3.0 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	3.89E+6 psi	26800 MPa	ASTM D638
Tensile Strength ³ (Yield)	23000 psi	159 MPa	ASTM D638
Tensile Strength ³ (Break)	23000 psi	159 MPa	ASTM D638
Tensile Elongation ² (Break)	1.0 %	1.0 %	ASTM D638
Flexural Modulus ⁴	3.00E+6 psi	20700 MPa	ASTM D790
Flexural Strength ⁴	36000 psi	248 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.16	0.16	
vs. Steel - Static	0.19	0.19	
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	1.1 ft-lb/in	59 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	532 °F	278 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	440 °F	227 °C	
CLTE - Flow	6.0E-5 in/in/°F	1.1E-4 cm/cm/°C	ASTM D696

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Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+3 to 1.0E+5 ohms	1.0E+3 to 1.0E+5 ohms	ASTM D257
Volume Resistivity	1.0E+3 to 1.0E+5 ohms·cm	1.0E+3 to 1.0E+5 ohms·cm	ASTM D257

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	250 °F	121 °C
Drying Time	2.0 hr	2.0 hr

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ 0.20 in/min (5.1 mm/min)

⁴ 0.050 in/min (1.3 mm/min)

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