LubriOne™ 5209 FPL 20 Natural

Acetal (POM) Copolymer

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	• Copolymer • Good Wear Resistance	• Low Friction • Lubricated	
Uses	• Appliance Components	• Conveyor Parts	• Printer Parts
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.51	1.51	ASTM D792
Molding Shrinkage - Flow	0.020 to 0.030 in/in	2.0 to 3.0 %	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]	351000 psi	2420 MPa	ASTM D638
Tensile Strength [2] (Yield)	6100 psi	42.1 MPa	ASTM D638
Tensile Elongation [2] (Break)	26 %	26 %	ASTM D638
Flexural Modulus [3]	260000 psi	1790 MPa	ASTM D790
Flexural Strength [3]	9900 psi	68.3 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.12	0.12	
vs. Steel - Static	0.13	0.13	
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	0.70 ft·lb/in	37 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)	307 °F	153 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	181 °F	82.8 °C	

Notes

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

[2] Type I, 0.20 in/min (5.1 mm/min)

[3] 0.050 in/min (1.3 mm/min)

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