

LubriOne™ AT-000/05T 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	EuropeLatin America	North America
Features	CopolymerLow Friction	LubricatedWear Resistant	
Uses	Appliance ComponentsAutomotive ApplicationsBearingsBusiness Equipment	Consumer ApplicationsConveyor PartsGearsIndustrial Applications	 Printer Parts Pulleys Rollers
Forms	 Pellets 		
Processing Method	 Injection Molding 		

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.43	1.43	ASTM D792
Molding Shrinkage - Flow	0.015 to 0.025 in/in	1.5 to 2.5 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.050 %	0.050 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	350000 psi	2410 MPa	ASTM D638
Tensile Strength ² (Yield)	7000 psi	48.3 MPa	ASTM D638
Tensile Elongation ² (Break)	40 %	40 %	ASTM D638
Flexural Modulus	350000 psi	2410 MPa	ASTM D790
Flexural Strength	11000 psi	75.8 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.12	0.12	
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), 0.125 in (3.18 mm), Injection Molded	1.0 ft·lb/in	53 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)	305 °F	152 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	202°F	94.4 °C	

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Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Processing (Melt) Temp	350 to 390 °F	177 to 199 °C	

Notes

¹ Typical values are not to be construed as specifications.

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² Type I, 0.20 in/min (5.1 mm/min)