LubriOne™ ATH-000/04S NATURAL

Acetal (POM) Homopolymer

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	• Homopolymer	• Low Friction	• Lubricated
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		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.38	1.38	ASTM D792
Molding Shrinkage - Flow	0.020 to 0.040 in/in	2.0 to 4.0 %	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]	280000 psi	1930 MPa	ASTM D638
Tensile Strength [2] (Yield)	7300 psi	50.3 MPa	ASTM D638
Tensile Strength [2] (Break)	7300 psi	50.3 MPa	ASTM D638
Flexural Modulus [3]	329000 psi	2270 MPa	ASTM D790
Flexural Strength [3]	11000 psi	75.8 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.11	0.11	
vs. Steel - Static	0.15	0.15	
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	60 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	316 °F	158 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	188 °F	86.7 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	160 °F	71.1 °C
Drying Time	2.0 hr	2.0 hr
Mold Temperature	140 to 160 °F	60.0 to 71.1 °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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