



# LubriOne™ ATH-000/18T 2S

## 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	• Good Wear Resistance • Homopolymer • Low Friction • Lubricated
Uses	• Appliance Components • Automotive Applications • Bearings • Business Equipment • Consumer Applications • Conveyor Parts • Gears • Industrial Applications • Printer Parts • Pulleys • Rollers
Forms	• Pellets
Processing Method	• Injection Molding

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.51	1.51	ASTM D792
Molding Shrinkage - Flow	0.020 to 0.023 in/in	2.0 to 2.3 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.20 %	0.20 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup>	350000 psi	2410 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	5500 psi	37.9 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	2.0 to 5.0 %	2.0 to 5.0 %	ASTM D638
Flexural Modulus	350000 psi	2410 MPa	ASTM D790
Flexural Strength	5500 psi	37.9 MPa	ASTM D790
Coefficient of Friction			ASTM D1894
vs. Steel - Dynamic	0.25	0.25	
vs. Steel - Static	0.14	0.14	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.0 ft·lb/in	53 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	255 °F	124 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	240 °F	116 °C	ASTM D648

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## Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	380 to 420 °F	193 to 216 °C

## Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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