



LubriOne™ ATC-10GF/02M

Acetal (POM) Copolymer

Key Characteristics

Product Description

PolyOne's LubriOne™ Lubricated and Wear-Resistant Compounds have been specifically formulated to be self-lubricating, offering low coefficient of friction and improved wear resistance properties. These compounds combine the unique benefits of internal lubricants such as PTFE, silicone, Aramide and molybdenum disulfide with a wide array of reinforcements and base engineering resins. Available in a wide range of physical properties, these materials are specified where certain key performance issues are critical. In addition to the standard range, products can be custom-formulated to meet your specific requirements or colors, offering you both product and design flexibility.

General

Material Status	• Commercial: Active		
Regional Availability	• Europe		
Features	• Low Friction	• Lubricated	• Wear Resistant
Uses	• Automotive Applications • Consumer Applications	• Electrical/Electronic Applications • Industrial Applications	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	1.45 g/cm ³	1.45 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)	7.0 to 11 g/10 min	7.0 to 11 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	4.00 to 6.00 cm ³ /10min	4.00 to 6.00 cm ³ /10min	ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	667000 psi	4600 MPa	ISO 527-2
Tensile Stress (Yield)	10200 psi	70.0 MPa	ISO 527-2
Tensile Strain (Yield)	10 %	10 %	ISO 527-2
Tensile Strain (Break)	15 %	15 %	ISO 527-2
Flexural Modulus	479000 psi	3300 MPa	ISO 178
Flexural Stress	16000 psi	110 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength	3.1 ft-lb/in ²	6.5 kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	27 ft-lb/in ²	57 kJ/m ²	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	316 °F	158 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	248 °F	120 °C	ISO 75-2/A
Vicat Softening Temperature	320 °F	160 °C	ISO 306
Melting Temperature (DSC)	329 to 338 °F	165 to 170 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Comparative Tracking Index	600 V	600 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.13 in (3.2 mm))	HB	HB	UL 94
Flammability Index	< 4 in/min	< 100 mm/min	FMVSS

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 212 °F	80 to 100 °C
Drying Time	4.0 hr	4.0 hr
Processing (Melt) Temp	374 to 410 °F	190 to 210 °C
Mold Temperature	167 to 212 °F	75 to 100 °C

Notes

¹ Typical values are not to be construed as specifications.

² +/-0.02



Beyond Polymers.

Better Business Solutions. SM