



# LubriOne™ ATC-000/20T Natural UV HF

## 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	• Africa & Middle East • Europe
Features	• Low Friction • UV Stabilized • Lubricated • Wear Resistant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.48 to 1.52 g/cm <sup>3</sup>	1.48 to 1.52 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	14 to 18 g/10 min	14 to 18 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	10 to 14 cm <sup>3</sup> /10min	10 to 14 cm <sup>3</sup> /10min	ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	334000 psi	2300 MPa	ISO 527-2
Tensile Stress	6530 psi	45.0 MPa	ISO 527-2
Tensile Strain (Break)	11 %	11 %	ISO 527-2
Flexural Modulus	290000 psi	2000 MPa	ISO 178
Flexural Stress	9430 psi	65.0 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength	0.95 ft-lb/in <sup>2</sup>	2.0 kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength	17 ft-lb/in <sup>2</sup>	35 kJ/m <sup>2</sup>	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	284 °F	140 °C	ISO 75-2/B
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	176 °F	80.0 °C	ISO 75-2/A
Vicat Softening Temperature	302 °F	150 °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 (0.12 in (3.0 mm))	HB	HB	UL 94
FMVSS Burning Speed	< 4 in/min	< 100 mm/min	DIN 75200

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## Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 212 °F	80 to 100 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	356 to 410 °F	180 to 210 °C
Mold Temperature	167 to 212 °F	75 to 100 °C

## Notes

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

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