# LubriOne™ ATC-10GF/02M

## Acetal (POM) Copolymer

## Key Characteristics

| Product Description | | | |
|---|---|---|---|
| PolyOne's LubriOne TM 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 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<br>• Consumer Applications | • Electrical/Electronic Applications<br>• 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/cm³ | 1.45 g/cm³ | 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 cm³/10min | 4.00 to 6.00 cm³/10min | 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/in² | 6.5 kJ/m² | ISO 179 |
| Charpy Unnotched Impact Strength | 27 ft·lb/in² | 57 kJ/m² | ISO 179 |
| **Thermal** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Heat Deflection Temperature | | | ISO 75-2/B |
| 66 psi (0.45 MPa), Unannealed | 316 °F | 158 °C | |
| Heat Deflection Temperature | | | ISO 75-2/A |
| 264 psi (1.8 MPa), Unannealed | 248 °F | 120 °C | |
| 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

### CONTACT INFORMATION

**Americas**

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

**Asia**

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

**Europe**

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314

*Beyond Polymers.*

*Better Business Solutions.* SM

www.polyone.com

**PolyOne Americas**
33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

**PolyOne Asia**
No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

**PolyOne Europe**
6 Giällewee
+352 269 050 35