



# LubriOne™ ATC-10CF/10T-2S BLACK 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<br>• Asia Pacific | • Europe<br>• North America         |
| Filler / Reinforcement | • Carbon\PTFE                            |                                     |
| Features               | • Low Friction<br>• Lubricated           | • UV Stabilized<br>• Wear Resistant |
| Appearance             | • Black                                  |                                     |
| Forms                  | • Pellets                                |                                     |
| Processing Method      | • Injection Molding                      |                                     |

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

| Physical                                                     | Typical Value (English)   | Typical Value (SI)     | Test Method |
|--------------------------------------------------------------|---------------------------|------------------------|-------------|
| Density <sup>2</sup>                                         | 1.42 g/cm <sup>3</sup>    | 1.42 g/cm <sup>3</sup> | ISO 1183    |
| Mechanical                                                   | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Tensile Modulus                                              | 1.28E+6 psi               | 8800 MPa               | ISO 527-2   |
| Tensile Stress                                               | 7250 psi                  | 50.0 MPa               | ISO 527-2   |
| Tensile Strain (Break)                                       | 0.50 to 1.0 %             | 0.50 to 1.0 %          | ISO 527-2   |
| Flexural Modulus                                             | 798000 psi                | 5500 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                               | 1.4 ft·lb/in <sup>2</sup> | 3.0 kJ/m <sup>2</sup>  | ISO 179     |
| Charpy Unnotched Impact Strength                             | 5.7 ft·lb/in <sup>2</sup> | 12 kJ/m <sup>2</sup>   | ISO 179     |
| Thermal                                                      | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Heat Deflection Temperature<br>264 psi (1.8 MPa), Unannealed | 248 °F                    | 120 °C                 | ISO 75-2/A  |
| 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       |

### 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 | 374 to 410 °F           | 190 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.

<sup>2</sup> +/-0.02

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