



# LubriOne™ ATC-000/20T BLACK UV

## Acetal (POM) Copolymer

### 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 | • Europe                      |
| Features              | • Lubricated • Wear Resistant |
| Uses                  | • Industrial Applications     |
| Forms                 | • Pellets                     |
| Processing Method     | • Injection Molding           |

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

| Physical                                                     | Typical Value (English)   | Typical Value (SI)     | Test Method |
|--------------------------------------------------------------|---------------------------|------------------------|-------------|
| Density                                                      | 1.50 g/cm <sup>3</sup>    | 1.50 g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage - Flow                                     | 0.019 in/in               | 1.9 %                  | ISO 294-4   |
| Molding Shrinkage - Across Flow                              | 0.020 in/in               | 2.0 %                  | ASTM D955   |
| Mechanical                                                   | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Tensile Modulus                                              | 326000 psi                | 2250 MPa               | ISO 527-2   |
| Tensile Stress (Break)                                       | 6090 psi                  | 42.0 MPa               | ISO 527-2   |
| Tensile Strain (Break)                                       | 15 %                      | 15 %                   | ISO 527-2   |
| Flexural Modulus                                             | 247000 psi                | 1700 MPa               | ISO 178     |
| Flexural Stress                                              | 13100 psi                 | 90.0 MPa               | ISO 178     |
| Impact                                                       | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Charpy Notched Impact Strength                               | 2.4 ft·lb/in <sup>2</sup> | 5.0 kJ/m <sup>2</sup>  | ISO 179     |
| Charpy Unnotched Impact Strength                             | 19 ft·lb/in <sup>2</sup>  | 40 kJ/m <sup>2</sup>   | ISO 179     |
| Thermal                                                      | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Heat Deflection Temperature<br>66 psi (0.45 MPa), Unannealed | 284 °F                    | 140 °C                 | ISO 75-2/B  |
| Heat Deflection Temperature<br>264 psi (1.8 MPa), Unannealed | 176 °F                    | 80.0 °C                | ISO 75-2/A  |
| Vicat Softening Temperature                                  | 302 °F                    | 150 °C                 | ISO 306     |
| Flammability                                                 | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Flame Rating                                                 | 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            | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Processing (Melt) Temp | 356 to 410 °F           | 180 to 210 °C      |
| Mold Temperature       | 140 to 212 °F           | 60 to 100 °C       |

#### Notes

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