



# LubriOne™ AT-000/18T-2S BLK

## Acetal (POM) Copolymer

### Key Characteristics

#### Product Description

PTFE and silicone lubricated Co-POM compounds

#### General

|                       |                               |                                  |          |
|-----------------------|-------------------------------|----------------------------------|----------|
| Material Status       | • Commercial: Active          |                                  |          |
| Regional Availability | • Africa & Middle East        | • Asia Pacific                   | • Europe |
| Features              | • Copolymer<br>• Low Friction | • Lubricated<br>• Wear Resistant |          |
| RoHS Compliance       | • RoHS Compliant              |                                  |          |
| Forms                 | • Pellets                     |                                  |          |
| Processing Method     | • Injection Molding           |                                  |          |

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

| Physical                                                                            | Typical Value (English)   | Typical Value (SI)     | Test Method |
|-------------------------------------------------------------------------------------|---------------------------|------------------------|-------------|
| Density / Specific Gravity                                                          | 1.47                      | 1.47                   | ASTM D792   |
| Density <sup>2</sup>                                                                | 1.48 g/cm <sup>3</sup>    | 1.48 g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage - Flow                                                            | 0.020 to 0.030 in/in      | 2.0 to 3.0 %           | ASTM D955   |
| Molding Shrinkage - Across Flow                                                     | 0.010 to 0.030 in/in      | 1.0 to 3.0 %           | ASTM D955   |
| Mechanical                                                                          | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Tensile Modulus                                                                     | 290000 psi                | 2000 MPa               | ISO 527-2   |
| Tensile Strength <sup>3</sup> (Break)                                               | 5800 psi                  | 40.0 MPa               | ASTM D638   |
| Tensile Stress                                                                      | 5800 psi                  | 40.0 MPa               | ISO 527-2   |
| Tensile Strain (Break)                                                              | > 10 %                    | > 10 %                 | ISO 527-2   |
| Flexural Modulus <sup>4</sup>                                                       | 252000 psi                | 1740 MPa               | ASTM D790   |
| Flexural Modulus                                                                    | 261000 psi                | 1800 MPa               | ISO 178     |
| Flexural Strength <sup>4</sup>                                                      | 9100 psi                  | 62.7 MPa               | ASTM D790   |
| Flexural Stress                                                                     | 8700 psi                  | 60.0 MPa               | ISO 178     |
| Coefficient of Friction                                                             |                           |                        | ASTM D1894  |
| vs. Steel - Dynamic                                                                 | 0.10                      | 0.10                   |             |
| vs. Steel - Static                                                                  | 0.18                      | 0.18                   |             |
| Taber Abrasion Resistance                                                           |                           |                        | ASTM D3884  |
| 1000 Cycles, 1000 g, H-18 Wheel                                                     | 120 mg                    | 120 mg                 |             |
| Impact                                                                              | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Charpy Notched Impact Strength (73°F (23°C))                                        | 1.9 ft·lb/in <sup>2</sup> | 4.0 kJ/m <sup>2</sup>  | ISO 179     |
| Charpy Unnotched Impact Strength 73°F (23°C)                                        | 19 ft·lb/in <sup>2</sup>  | 40 kJ/m <sup>2</sup>   | ISO 179     |
| Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded               | 0.70 ft·lb/in             | 37 J/m                 | ASTM D256A  |
| Thermal                                                                             | Typical Value (English)   | Typical Value (SI)     | Test Method |
| Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm) | 304 °F                    | 151 °C                 | ASTM D648   |

| Thermal                                           | Typical Value (English) | Typical Value (SI) | Test Method |
|---------------------------------------------------|-------------------------|--------------------|-------------|
| Deflection Temperature Under Load                 |                         |                    | ASTM D648   |
| 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm) | 178 °F                  | 81.1 °C            |             |
| Flammability                                      | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating                                      |                         |                    | UL 94       |
| 0.06 in (1.5 mm)                                  | HB                      | HB                 |             |
| 0.12 in (3.0 mm)                                  | HB                      | HB                 |             |

**Notes**

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

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

<sup>3</sup> 2.0 in/min (50 mm/min)

<sup>4</sup> 0.050 in/min (1.3 mm/min)



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