



LubriOne™ AT-000/15T

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 | • Africa & Middle East • Asia Pacific | • Europe • Latin America | |
| Features | • Copolymer • Good Wear Resistance | • Low Friction • Lubricated | |
| Uses | • Appliance Components • Automotive Applications • Bearings • Business Equipment | • Consumer Applications • Conveyor Parts • Gears • Industrial Applications | • Printer Parts • Pulleys • Rollers |
| RoHS Compliance | • RoHS Compliant | | |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity | 1.48 | 1.48 | ASTM D792 |
| Molding Shrinkage - Flow | 0.020 to 0.023 in/in | 2.0 to 2.3 % | ASTM D955 |
| Water Absorption (24 hr, 0.125 in (3.18 mm)) | 0.15 % | 0.15 % | ASTM D570 |
| Mechanical | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Modulus ² | 325000 psi | 2240 MPa | ASTM D638 |
| Tensile Strength ² (Yield) | 6500 psi | 44.8 MPa | ASTM D638 |
| Tensile Elongation ² (Break) | 7.0 to 8.0 % | 7.0 to 8.0 % | ASTM D638 |
| Flexural Modulus | 325000 psi | 2240 MPa | ASTM D790 |
| Flexural Strength | 10500 psi | 72.4 MPa | ASTM D790 |
| Coefficient of Friction | | | ASTM D1894 |
| vs. Steel - Dynamic | 0.36 | 0.36 | |
| vs. Steel - Static | 0.18 | 0.18 | |
| Impact | Typical Value (English) | Typical Value (SI) | Test Method |
| Notched Izod Impact | | | ASTM D256A |
| 73°F (23°C), 0.125 in (3.18 mm), Injection Molded | 0.90 ft-lb/in | 48 J/m | |
| Thermal | Typical Value (English) | Typical Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm) | 320 °F | 160 °C | |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm) | 310 °F | 154 °C | |
| Flammability | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating | HB | HB | UL 94 |

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Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 370 to 410 °F | 188 to 210 °C |

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

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