

## **Material Data Sheet**

**COMPOUND**: 757

**POLYMER**: Polyamide (PA)

**DESCRIPTION:** MoS2 Filled Nylon 6/6 (PA), Extruded Stock Shapes and Machined parts,

| Property  | Test Method | Typical Values             | Units   |
|---|-------------|----------------------------|---|
| Specific Gravity  | ASTM D792   | 1.16                       | -   |
| Water Absorption<br>24 HRS, Immersion<br>Saturation, Immersion              | ASTM D570   | 0.3<br>7.0                 | %   |
| Hardness  | ASTM D785   | 115<br>85                  | ROCKWELL R<br>ROCKWELL M                                |
| Hardness  | ASTM D2240  | 85                         | SHORE-D   |
| Tensile Strength at Break   | ASTM D638   | 12,500 (86.18)             | PSI (MPa)   |
| Elongation at Break   | ASTM D638   | 25                         | %   |
| Tensile Modulus   | ASTM D638   | 480,000 (3,309.5)          | PSI (MPa)   |
| Compressive Strength  | ASTM D695   | 16,000 (110.32)            | PSI (MPa)   |
| Compressive Modulus   | ASTM D695   | 420,000 (2,895.8)          | PSI (MPa)   |
| Flexural Strength   | ASTM D790   | 17,000 (117.21)            | PSI (MPa)   |
| Flexural Modulus  | ASTM D790   | 460,000 (3,171.6)          | PSI (MPa)   |
| Shear Strength  | ASTM D732   | 10,500 (72.39)             | PSI (MPa)   |
| Izod Impact Strength, Notched   | ASTM D256   | 0.5                        | FT.LB/INCH  |
| Coefficient of Linear Thermal Expansion                                     | ASTM D696   | 4.00 (7.20)                | X 10 <sup>-5</sup> °F <sup>-1</sup> (°C <sup>-1</sup> ) |
| Heat Deflection Temperature<br>@ 264 PSI (1.82 MPa)                         | ASTM D648   | 200 (93.3)                 | °F (°C)   |
| Maximum Continuous Operating Temperature Intermittent Operating Temperature |             | 220 (104.4)<br>330 (165.6) | °F (°C)   |

REVISION HISTORY
REV. NONE – Initial Release, 5-14-1990 BJ

REV. A - Updated data sheet format on new template. Added additional test data. 10-15-2020 RSK