



**COMPOUND:** 773

**POLYMER:** Polyamide (PA)

**DESCRIPTION:** Nylon 6/12 unfilled, Cast Stock Shapes and Machined parts, Yellow Colored

| Property                                                           | Test Method | Internal Specification Values | Typical Values                             | Units      |
|--------------------------------------------------------------------|-------------|-------------------------------|--------------------------------------------|------------|
| Specific Gravity                                                   | ASTM D792   | 1.13 +/- 0.03                 | 1.13                                       | -          |
| Water Absorption<br>24 HRS, Immersion<br>Saturation, Immersion     | ASTM D570   |                               | 0.2 – 0.3<br>3.0 – 5.0                     | %          |
| Hardness                                                           | ASTM D785   | 75 - 81                       | 77                                         | SHORE-D    |
| Tensile Strength at Break                                          | ASTM D638   | 8,700 (59.98)<br>Minimum      | 10,000 (68.95)                             | PSI (MPa)  |
| Elongation at Break                                                | ASTM D638   | 25 Minimum                    | 37                                         | %          |
| Tensile Modulus                                                    | ASTM D638   |                               | 375,000 – 475,000<br>(2,585.53 – 3,275.01) | PSI (MPa)  |
| Compressive Strength                                               | ASTM D695   |                               | 12,000 – 14,000<br>(82.74 – 96.53)         | PSI (MPa)  |
| Compressive Modulus                                                | ASTM D695   |                               | 275,000 – 375,000<br>(1,896.06 – 2,585.53) | PSI (MPa)  |
| Flexural Strength                                                  | ASTM D790   |                               | 13,000 – 16,000<br>(89.63 – 110.32)        | PSI (MPa)  |
| Flexural Modulus                                                   | ASTM D790   |                               | 325,000 – 475,000<br>(2,240.80 – 3,275.01) | PSI (MPa)  |
| Izod Impact Strength, Notched                                      | ASTM D256   |                               | 2.00 – 4.00                                | FT.LB/INCH |
| Deformation Under Load                                             | ASTM D621   |                               | 1.00 – 3.00                                | %          |
| Heat Deflection Temperature<br>@ 264 PSI (1.82 MPa)                | ASTM D648   |                               | 200 (93.3) – 300 (148.89)                  | °F (°C)    |
| Coefficient of Friction, Dynamic                                   | ASTM D1894  |                               | 0.26                                       |            |
| Continuous Service Temperature<br>Intermittent Service Temperature |             |                               | 210 (98.89)<br>300 (148.89)                | °F (°C)    |

**REVISION HISTORY**

REV. NONE – Initial Release, 4-23-2001 BJ

REV. A – Updated data sheet format on new template. Added additional test data. 1012-2020 RSK

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