

NYLACAST MOLY

| PROPERTY | TEST METHOD | NOTES | METRIC | UNITS | IMPERIAL | UNITS |
|--|-------------------------|--------------------------|---------|-----------|------------|-----------|
| GENERAL | | | | | | |
| Colour | - | - | - | Black | - | Black |
| Density | ISO 1183:1997 | Test Method A | g/cm3 | 1.15 | lb/inchE3 | 0.041 |
| Moisture Absorption (Equilibrium) | ISO 62:1999 (modified) | 50% RH, 23°C | % | 2.1 | % | 2.1 |
| Water Absorption @24 hrs | ISO 62:1999 (modified) | Immersion @ 23°C | % | 0.2 | % | 0.2 |
| Water Absorption @24 hrs Saturation | ISO 62:1999 | Immersion @ 23°C | % | 6.3 | % | 6.3 |
| MECHANICAL | | | | | | |
| Tensile Strength at Yield E-modulus | ISO 527-1/2:1993 | Sample Type 1B, 50mm/min | MPa | 75-80 | psi | 11.7k |
| Elongation at Break | ISO 527-1/2:1993 | Sample Type 1B, 50mm/min | MPA | 3800-4000 | psi | 629k |
| Compressive Strength | ISO 527-1/2:1993 | Sample Type 1B, 50mm/min | % | >20 | % | >20 |
| Compressive Modulus | ISO 604:2002 | Sample Type B, 5mm/min | MPa | 105 | psi | 15.3k |
| Flexural Strength | ISO 604:2002 | Sample Type A, 1mm/min | MPa | 2500-2700 | psi | 348k |
| Flexural Modulus | ISO 178:2001 | 1.5mm/min | MPa | 100-110 | psi | 13.8k |
| Izod Impact Strength | ISO 178:2001 | 1.5mm/min | MPa | 3000-3200 | psi | 430k |
| Dynamic Coefficient of Friction | ISO 180:2000 | Sample Type A (notched) | kJ/mm2 | 5.5-7.0 | ft.lb/inE2 | 3.5 |
| Limiting PV | - | 31.4m/min, 1.75MPa | - | 0.101 | - | 0.101 |
| K-Factor (wear factor) | - | - | MPa/m | 100 | psi.ft/min | 2.9k |
| Hardness (Shore D) | - | 31.4m/min, 1.75MPa | mm3/N | 2.2x10E-5 | - | 1.1x10E4 |
| | ISO 868: 2003 | Scale D | m Shore | 80 | Shore D | 80 |
| THERMAL | | | | | | |
| Melting Temperature, Tg | - | - | °C | 221 | °F | 430 |
| Glass Transition Temperature | ISO 11359:1999 | - | °C | 68 | °F | 154 |
| Heat Deflection Temperature, HDT/A | ISO 75 | 1.80MPa | °C | 80 | °F | 176 |
| Maximum/Minimum Continuous Service Temperatures | - | - | °C | 105/-40 | °F | 221/40 |
| Maximum/Minimum Intermittent Service Temperatures | - | - | °C | 170/-100 | °F | 338/-148 |
| Temperatures Coefficient of Linear Thermal Expansion | ISO 11359-2:1999 | 23-55°C | °C-1 | 8.51E-05 | °F,E-1 | 4.7x10E-5 |
| Thermal Conductivity | ISO 8301:1991 | Mean T = 20°C | W/moC | 0.28 | °F | 0.17 |
| Flammability | IEC 60695-11-10:2003-08 | - | - | HB | - | HB |
| ELECTRICAL | | | | | | |
| Dielectric Constant | IEC 60250:1969-01 | 1 & 100 Hz | - | 3.7 & 4 | - | 3.7 & 4 |
| Dissipation Factor | IEC 60250:1969-01 | 100 Hz | - | 0.11 | - | 0.11 |
| Dielectric Strength | IEC 60243:-1:1998-01 | - | kV/m | 25 | kV/in | 635 |
| Volume Resistivity | IEC 60093:1980-01 | - | ohm.m | >1x10E13 | ohm.m | 4x10E14 |
| Surface Resistivity | IEC 60093:1980-01 | - | ohm.m | >1x10E12 | ohm.m | >1x10E12 |
| Comparative Tracking Index | IEC 60112:2003-01 | - | CTI | 600 | CTI | 600 |

| PRODUCT AVAILABILITY |
|-----------------------------------|
| Rod10mm-500mm DIA |
| Tube50mm-1000mm OD |
| Plate6mm-100mm THICKNESS |
| Custom CastingsBespoke |
| Cut to sizeAvailable upon request |

NOTES

- All information contained in this literature correspond with our current knowledge of the products.
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