

NYLACAST NYLUBE

| PROPERTY | TEST METHOD | NOTES | METRIC | UNITS | IMPERIAL | UNITS |
|---|-------------------------|--------------------------|---------------------|-----------|------------|-----------|
| GENERAL | | | | | | |
| Colour | - | - | - | Dark Red | - | Dark Red |
| Density | ISO 1183:1997 | Test Method A | g/cm ³ | 1.141 | lb/inchE3 | 0.041 |
| Moisture Absorption (Equilibrium) | ISO 62:1999 (modified) | 50% RH, 23°C | % | 2 | % | 2 |
| 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 | % | 5.9 | % | 5.9 |
| MECHANICAL | | | | | | |
| Tensile Strength at Yield | ISO 527-1/2:1993 | Sample Type 1B, 50mm/min | MPa | 80-90 | psi | 12.8k |
| E-modulus | ISO 527-1/2:1993 | Sample Type 1B, 50mm/min | MPa | 3600-4000 | psi | 596k |
| Elongation at Break | ISO 527-1/2:1993 | Sample Type 1B, 50mm/min | % | >30 | % | >30 |
| Compressive Strength | ISO 604:2002 | Sample Type B, 5mm/min | MPa | 105-125 | psi | 14.7k |
| Compressive Modulus | ISO 604:2002 | Sample Type A, 1mm/min | MPa | 2500-2700 | psi | 377k |
| Flexural Strength | ISO 178:2001 | 1.5mm/min | MPa | 115-125 | psi | 15.9k |
| Flexural Modulus | ISO 178:2001 | 1.5mm/min | MPa | 3350-3600 | psi | 486k |
| Izod Impact Strength | ISO 180:2000 | Sample Type A (notched) | kJ/mm ² | 5.5-7.0 | ft.lb/inE2 | 3.5 |
| Dynamic Coefficient of Friction | - | 31.4m/min, 1.75MPa | - | 0.075 | - | 0.075 |
| Limiting PV | - | - | MPa/m | 100 | psi.ft/min | 2.9k |
| K-Factor (wear factor) | - | 31.4m/min, 1.75MPa | mm ³ /Nm | 3.9x10E-6 | - | 1.9x10E4 |
| Hardness (Shore D) | ISO 868: 2003 | Scale D | Shore D | 83 | Shore D | 83 |
| THERMAL | | | | | | |
| Melting Temperature, Tg | - | - | °C | 222 | °F | 433 |
| Glass Transition Temperature | ISO 11359:1999 | - | °C | 65 | °F | 149 |
| Heat Deflection Temperature, HDT/A | ISO 75 | 1.80MPa | °C | 75 | °F | 167 |
| Maximum/Minimum Continuous Service Temperatures | - | - | °C | 110/-40 | °F | 230/-40 |
| Maximum/Minimum Intermittent Service Temperatures | - | - | °C | 180/-100 | °F | 356/-148 |
| Coefficient of Linear Thermal Expansion | ISO 11359-2:1999 | 23-55°C | °C ⁻¹ | 8x10E-5 | °F.E-1 | 4.4x1-E-5 |
| Thermal Conductivity | ISO 8301:1991 | Mean T = 20°C | W/moC | 0.25 | °F | 0.15 |
| 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 | - | 0.013 | - | 0.013 |
| 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 |
| FDA Compatibility | | | | | | |
| | | | | YES | YES | |

| PRODUCT AVAILABILITY | | NOTES |
|----------------------|------------------------|---|
| Rod | 10mm-500mm DIA | <ul style="list-style-type: none"> All information contained in this literature correspond with our current knowledge of the products. Nylacast assume no liability whatsoever in respect of application, conversion or use made of the aforementioned information or product, or any consequence thereof. The buyer undertakes all liability in respect of the application, conversion or use of the aforementioned information or product. Existing intellectual property rights must be observed and Nylacast reserve the right to make technical alterations. |
| Tube | 50mm-1000mm OD | |
| Plate | 6mm-100mm THICKNESS | |
| Custom Castings | Bespoke | |
| Cut to size | Available upon request | |