

Raw Material Nylon (PA6)

| General Properties | Test Method | Unit | Value |
|---|-------------------------|-------------------|-----------------------|
| Density | ISO 1183:1987 | g/cm ³ | 1.141 |
| Water Absorption (24 Hours) | ISO 62:1999(modified) | % | 0.3 |
| Water Absorption (Saturation) | ISO 62:1999 | % | 7.0 |
| Food Compliance | - | FDA/BfR | YES |
| UV Stability | - | - | - |
| Mechanical Properties | | | |
| Tensile Strength | ISO 527-1/2:1993 | MPa | 75-80 |
| Elongation at Break | ISO 527-1/2:1993 | % | >20 |
| Elastic Modulus | ISO 527-1/2:1993 | MPa | 3400-3600 |
| Compressive Strength | ISO 604:2002 | MPa | 95-120 |
| Izod Imoact Strength | ISO 180:2000 | KJ/m ² | 4.5-6 |
| Wear Rate | - | mg/km | 0.11 |
| Hardness (Shore D) | ISO 868:2003 | Scale D | 83 |
| Coefficient Of Friction (Dynamic) | - | - | 0.160 |
| Thermal Properties | | | |
| Melting Temperature | ISO 3146 | °C | 223 |
| Thermal Conductivity | ISO 8301:1991 | W/m°C | 0.26 |
| Deformation at temperature HDT | ISO 75 | °C | 75 |
| Coefficient Of Linear Thermal Expansion | ISO 11359-2:1999 | °C ⁻¹ | 8 x 10 ⁻⁵ |
| Service Temperature, Long Term | Average | °C | 100 |
| Service Temperature, Short Term (MAX) | Average | °C | 170 |
| Minimum Operating Temperature | Average | °C | -40 |
| Flammability | UL 94 (3-6mm thickness) | - | HB |
| Electrical Properties | | | |
| Dielectric Constant | IEC 60250-1969-01 | - | 3.7 |
| Dissipation Factor (100 Hz) | IEC 60250:1969-01 | Hz | 0.02 |
| Volume Resistivity | IEC 60093:1980-01 | Ωm | >1 x 10 ¹³ |
| Dielectric Strength | IEC 60243-1:1998-01 | KV/mm | 25 |
| Surface Resistivity ROA | IEC 60093:1980-01 | Ω | >1 x 10 ¹² |

Applications:

- Crane Sheaves
- Carriage Wheels
- Outrigger Pads
- Heavy Load Bearings

Characteristics:

- Excellent Mechanical Strength
- High Chemical Resistance
- Excellent Wear Resistance
- Very good Sliding Properties



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