

Raw Material Nylon (PA6)

General Properties	Test Method	Unit	Value
Density	ISO 1183:1987	g/cm ³	0.041
Moisture Absorption (Equilibrium)	ISO 62:1999	%	2
Water Absorption (24 Hours)	ISO 62:1999(modified)	%	0.2
Water Absorption (Saturation)	ISO 62:1999	%	6.1
Food Compliance	-	FDA/BfR	YES
UV Stability	-	-	YES
Mechanical Properties			
Tensile Strength	ISO 527-1/2:1993	MPa	74-78
Elongation at Break	ISO 527-1/2:1993	%	>30
Elastic Modulus	ISO 527-1/2:1993	MPa	3500-3700
Compressive Strength	ISO 604:2002	MPa	110-120
Izod Impact Strength	ISO 180:2000	KJ/m ²	5-6.5
Wear Rate	-	mg/km	0.11
Hardness (Shore D)	ISO 868:2003	Scale D	82
Coefficient Of Friction (Dynamic)	-	-	0.089
Thermal Properties			
Melting Temperature	ISO 3146	°C	222
Thermal Conductivity	ISO 8301:1991	W/m°C	0.25
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	110
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	0.014
Volume Resistivity	IEC 60093:1980-01	Ωm	>1 x 10 ¹³
Dielectric Strength	IEC 60243-1:1998-01	KV/mm	25

Applications:

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

Characteristics:

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



All information contained in this literature corresponds with our current knowledge of the products. Tynic Automation assume no liability whatsoever in respect of application, conversion or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability in respect of the application, conversion or use of the aforementioned information or products. Existing intellectual property rights must be observed and Tynic Automation reserve the right to make technical alterations.