

Raw Material Nylon (PA6)

General Properties	Test Method	Unit	Value
Density	ISO 1183:1987	g/cm ³	1.138
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 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



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