

Technical Properties for Nylon 6

	Norm	Unit i.e.	Value
<u>Physical Properties</u>			
Specific Gravity	ISO 1183	g/cm ³	1.13
Water Absorption	DIN 53495	%	3
Chemical resistance	-	-	-
Maximum service temp	-	degrees C	100
Minimum service temp	-	degrees C	-40
<u>Mechanical Properties</u>			
Tensile strength at yeild	ISO 527	MPa	90/45
Elongation at yeild	ISO 527	%	4.5/20
Tensile strength at break	ISO 527	MPa	-
Elongation at break	ISO 527	%	>50
Impact strength	ISO 179	kJ/m ²	0.B.
Notch impact strength	ISO 179	kJ/m ²	9
Ball indentation (Rockwell)	ISO 2039	MPa	160/70
Shore D	DIN 53505	-	77
Flexural strength	ISO 178	MPa	-
Modulus elasticity	ISO 527	MPa	3000/1000
<u>Thermal Properties</u>			
Vicat softening temp	ISO 306	degrees C	-
Heat deflection Temp	ISO 75	degrees C	160
Coefficient of expansion	DIN 53752	K-1 x 10-4	0.85
Thermal conduct at 20	DIN 52612	W/(mxK)	0.28
<u>Electrical Properties</u>			
Volume resistivity	VDE 0303	x cm	>10 13
Surface resistivity	VDE 0303	-	>10 10
Dielectric constant @ 1MHz	DIN 53483	-	3.5/7
Diel. loss factor @ 1 MHz	DIN 53483	-	0.031/0.3
Dielectric strength	VDE 0303	kV/mm	20-50
Tracking resistance	DIN 53480	-	CTI 600
<u>Additional Data</u>			
Bondability	-	-	+
Friction Coeficient	DIN 53375	-	0.38-0.45
Flamability	UL 94	-	HB
<u>Chemical properties</u>			
Acid resistance			-
Hydroxid resistance (dilute)			+
Hydrocarbonat resistance			+/0
CKW resistance			-
Aromatic resistance			+/0
Ketone resistance			+
Resistance to hot water			+/0