

Material Data Sheet

PI - Polyimide

Polyimide (PI) is a non melting high temperature polymer. Strength, dimensional stability, and creep resistance remain high even at temperatures above 360°C

Properties	Temperature	Test Standard or Instrument	Unit	PI-N	PI-G15
Physical Properties					
Color	-	-	-	Brown	Black
Density	-	GB1033	g/cm³	1.38-1.42	1.42-1.45
Mechanical Properties					
Tensile Strength	23℃	GB/T1040-2006	Mpa	85	89
	260℃			49.4	54
Elongation at Break	23℃	GB/T1040-2006	%	6.3	3.7
	260℃			-	-
Tensile Modulus	23℃	GB/T1040-2006	Mpa	3140	4400
	260℃			-	-
Flexural Strength	23℃	GB/T1040-2000	Mpa	110	137
	260℃			60	99
Flexural Modulus	23℃	GB/T1040-2000	Mpa	2990	4500
	260℃			1640	3000
Compress Strength	23℃	GB/T1040-2000	Mpa	135	124
	260℃			83.8	100
Compress Modulus	23℃	GB/T1040-2000	Mpa	1620	1600
	260℃			1410	1400
Izod Unotched Impact Strength	23℃	GB/T16420-1996	Kj/m²	83.2	45
	260℃			-	-
Thermal Properties					
Coefficient of Linear Expansion		296-573K	μm/m/℃	53	49
Deflection Temperature		GB/T 1634.2	℃	>360	>360
Electrical Properties					
Surface Resistvity		GB1410	Ω	10 ¹⁴	-
Volume Resistvity		GB1410	Ω.cm	10 ¹⁵	-
Dielectric Strength		-	KV/mm	22	-
Dielectric Constant		-	-	3.6	-
NOTE: *The data stated above are typical values intended for reference and comparison purposes only. *The data should not be used as a basis for design specifications or quality control. *The information is provided as a guide to the best of our knowledge and given without obligation or liability. *Testing under individual application circumstances is recommended.					

* PI-N, Natural (Unfilled) PI

* PI-G15, 15% Graphite Filled PI