

## PI (Polyimide)

### Material Specification (Typical Properties)

#### Physical

Property	Method	Units	Specification
Specific Gravity	---	g/cm <sup>3</sup>	1.34
Water Absorption	DIN EN ISO 62	%	1.08 / 3.29

#### Mechanical

Property	Method	Units	Specification
Modulus of elasticity (tensile test)	DIN EN ISO 527-1	MPa	3600
Tensile strength	DIN EN ISO 527-1	MPa	116
Elongation at break	DIN EN ISO 527-1	MPa	3,8
Elongation at break	DIN EN ISO 178	%	6
Flexural strength	DIN EN ISO 178	MPa	170
Modulus of elasticity (flexural test)	DIN EN ISO 178	MPa	3700
Compression strength	EN ISO 604	MPa	500
Compression strength	EN ISO 604	MPa	190
Compression modulus	EN ISO 604	MPa	2000
Compressive strain at break	EN ISO 604	%	45
Impact strength (Charpy)	DIN EN ISO 179-1eU	kJ/m <sup>2</sup>	75.8
Notched impact strength (Charpy)	DIN EN ISO 179-1eA	kJ/m <sup>2</sup>	5
Shore hardness	DIN 53505	D	90

#### Electrical

Property	Method	Units	Specification
Specific surface resistance	DIN IEC 60093	Ω	10 <sup>16</sup>
Specific volume resistance	DIN IEC 60093	Ω*cm	10 <sup>17</sup>

#### Thermal

Property	Method	Units	Specification
Glass transition temperature	---	°C	368
Service temperature	---	°C	---