

**PA 66 (Polyamide 6)
Material Specification
(Typical Properties)**

Physical

Property	Method	Units	Specification
Specific Gravity	---	g/cm ³	1.15
Water Absorption	DIN EN ISO 62	%	0.02 / 0.4

Mechanical

Property	Method	Units	Specification
Modulus of elasticity (tensile test)	DIN EN ISO 527-2	MPa	3200
Tensile strength	DIN EN ISO 527-2	MPa	84
Tensile strength at yield	DIN EN ISO 527-2	MPa	83
Elongation at yield	DIN EN ISO 527-2	%	10
Elongation at break	DIN EN ISO 527-2	%	40
Flexural strength	DIN EN ISO 178	MPa	114
Modulus of elasticity (flexural test)	DIN EN ISO 178	MPa	3100
Compression strength	EN ISO 604	MPa	20 / 38
Compression modulus	DIN EN ISO 527-2	MPa	2700
Impact strength (Charpy)	DIN EN ISO 179-1eU	kJ/m ²	n.b.
Notched impact strength (Charpy)	DIN EN ISO 179-1eA	kJ/m ²	5

Electrical

Property	Method	Units	Specification
Specific surface resistance	DIN IEC 60093	Ω	10 ¹⁴
Specific volume resistance	DIN IEC 60093	Ω*cm	10 ¹⁴

Thermal

Property	Method	Units	Specification
Glass transition temperature	DIN 53765	°C	52
Melting temperature	DIN 53765	°C	253
Service temperature	DSC (short term)	°C	170
Service temperature	DSC (long term)	°C	100
Thermal expansion (CLTE)	DIN EN ISO 11359-1;2	10 ⁻⁵ K ⁻¹	11
Thermal expansion (CLTE)	DIN EN ISO 11359-1;2	10 ⁻⁵ K ⁻¹	12
Specific heat	ISO 22007-4:2008	J/(g*K)	1.5
Thermal conductivity	ISO 22007-4:2008	W/(K*m)	0.36

Disclaimer. These figures are typical values for the material and do not represent a product specification. Properties will vary depending on source of raw material, method of processing, physical form of product, direction of measurement etc.