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PA 6.6 (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	3500
Tensile strength	DIN EN ISO 527-2	MPa	85
Tensile strength at yield	DIN EN ISO 527-2	MPa	84
Elongation at yield	DIN EN ISO 527-2	%	7
Elongation at break	DIN EN ISO 527-2	%	70
Flexural strength	DIN EN ISO 178	MPa	110
Modulus of elasticity (flexural test)	DIN EN ISO 178	MPa	3100
Compression strength	EN ISO 604	MPa	20 / 35
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
Ball indentation hardness	ISO 2039-1	MPa	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	47
Melting temperature	DIN 53765	°C	258
Service temperature	DSC	°C	100
Service temperature	DSC	°C	75
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