

TECHNICAL DATA SHEET

Engineering plastic type NY

General notes:

- » **PA66/GF50** polyamide 66 reinforced with 50 wt% glass fibre
- » high strength, fatigue, wear and creep resistance
- » heat stabilized, good heat capability
- » good chemical resistance (oils, grease, fuels, non polar solvents); not resistant to strong acids, alkalis and hot water or steam
- » insulative
- » typical applications include plastic tweezers, plastic tip tweezers, MPT's, tool handles

Mechanical properties

Elastic modulus +23°C	16000 MPa	<i>ASTM D 790</i>
Elastic modulus +60°C	14000 MPa	<i>ASTM D 790</i>
Elastic modulus +90°C	8000 MPa	<i>ASTM D 790</i>
Elastic modulus +120°C	5000 MPa	<i>ASTM D 790</i>
Tensile strength +23°C	220 MPa	<i>ISO 527</i>
Tensile strength +60°C	160 MPa	<i>ISO 527</i>
Tensile strength +90°C	110 MPa	<i>ISO 527</i>
Tensile strength +120°C	85 MPa	<i>ISO 527</i>
Izod-Impact strength (notched) +23°C	140 J/m	<i>ASTM D 256</i>
Charpy-Impact strength (unnotched) +23°C	85 kJ/m²	<i>DIN 53453</i>

Thermal properties

Temp. of defl. under load (1.80 MPa)	235 °C	<i>ASTM D648</i>
Temp. of defl. under load (0.45 MPa)	255 °C	<i>ASTM D648</i>
Vicat softening temperature (50°C/h 50N)	250 °C	<i>ISO 306</i>
Coef. of lin. therm expansion, normal	7.00 E-6/°C	<i>ASTM D 696</i>
Continuous Use Temperature	130°C	<i>20'000 h</i>
Short Time Temperature	185°C	

Electrical properties

Comparative tracking index	500 Volts	<i>IEC 112</i>
Electric strength (2mm)	21.0 kV/mm	<i>IEC 243-1</i>

Other properties

Density	1.57 g/ccm	<i>ISO 1183</i>
Water absorption in water 23°C (24h)	0.65%	<i>ISO 62</i>