

Properties

Mechanical properties		ISO-Nomenclature PA 6, MHR, 14-110N, GF 35			
Density		ISO 1183	g/cm ³	dry	1,41
Tensile E-Modulus	(1 mm/min)	ISO 527	MPa	dry	11500
		ISO 527	MPa	cond	6900
Tensile strength at yield	(5 mm/min)	ISO 527	MPa	dry	225
		ISO 527	MPa	cond	145
Elongation at yield	(5 mm/min)	ISO 527	%	dry	3
		ISO 527	%	cond	5
Tensile at break	(5 mm/min)	ISO 527	MPa	dry	225
		ISO 527	MPa	cond	140
Elongation at break	(5 mm/min)	ISO 527	%	dry	4
		ISO 527	%	cond	7
Impact strength	(Charpy, 23°C)	ISO 179/1eU	kJ/m ²	dry	70
		ISO 179/1eU	kJ/m ²	cond	75
Impact strength	(Charpy, -30°C)	ISO 179/1eU	kJ/m ²	dry	65
		ISO 179/1eU	kJ/m ²	cond	70
Notched impact strength	(Charpy, 23°C)	ISO 179/1eA	kJ/m ²	dry	11
		ISO 179/1eA	kJ/m ²	cond	20
Notched impact strength	(Charpy, -30°C)	ISO 179/1eA	kJ/m ²	dry	8
		ISO 179/1eA	kJ/m ²	cond	9
Ball indentation hardness		ISO 2039-1	MPa	dry	-
		ISO 2039-1	MPa	cond	-
Thermal properties					
Melting point	(DSC)	ISO 11357	°C	dry	222
Heat deflection temperature HDT/A	(1.80 MPa)	ISO 75	°C	dry	205
Heat deflection temperature HDT/B	(0.45 MPa)	ISO 75	°C	dry	*
Heat deflection temperature HDT/C	(8.00 MPa)	ISO 75	°C	dry	165
Thermal expansion coefficient long.	(23 - 80°C)	ISO 11359	10 ⁻⁴ /K	dry	0,25
Thermal expansion coefficient trans.	(23 – 80°C)	ISO 11359	10 ⁻⁴ /K	dry	0,8
Maximum usage temperature	Long term	EMS	°C	dry	90-110
Maximum usage temperature	Short term	EMS	°C	dry	160
Electrical properties					
Dielectric strength	K20/P50	IEC 243-1	kV/mm	dry	35
		IEC 243-1	kV/mm	cond	33
Comparative tracking index	CTI	IEC 112	---	dry	*
		IEC 112	---	cond	500
Volume resistivity		IEC 93	Ω*m	dry	10 ¹²
		IEC 93	Ω*m	cond	10 ¹¹
Specific surface resistivity		IEC 93	Ω	dry	*
		IEC 93	Ω	cond	10 ¹²
Behaviour towards external influences					
Flammability	(0,8mm)	UL 94	rating		HB
Water absorption	(23°C/sat.)	DIN 53495	%		7
Moisture absorption	(23°C/50%r.F.)	i.A. DIN 53495	%		2
Processing properties					
Linear mould shrinkage	long.	ISO 294	%	dry	0,10
Linear mould shrinkage	trans.	ISO 294	%	dry	0,75

The test values <conditioned> were attained on test pieces stored according to ISO 1110.

* acc. CAMPUS 4.1 not relevant.

The recommendations and data given are based on our experience to date. No liability can be assumed in connection with their usage and processing.