

**Properties**

<b>Mechanical properties</b>	<b>ISO-Nomenclature PA 66, MHR, 14-100N, GF 30</b>				
Density		ISO 1183	g/cm <sup>3</sup>	dry	1,35
Tensile-E-Modulus	(1 mm/min)	ISO 527	MPa	dry	10000
		ISO 527	MPa	cond.	7000
Tensile strength at yield	(50 mm/min)	ISO 527	MPa	dry	*
		ISO 527	MPa	cond.	*
Elongation at yield	(50 mm/min)	ISO 527	%	dry	*
		ISO 527	%	cond.	*
Tensile strength at break	(5 mm/min)	ISO 527	MPa	dry	200
		ISO 527	MPa	cond.	150
Eglonation at break	(5 mm/min)	ISO 527	%	dry	3,5
		ISO 527	%	cond.	5
Impact strength	(Charpy, 23°C)	ISO 179/1eU	kJ/m <sup>2</sup>	dry	90
		ISO 179/1eU	kJ/m <sup>2</sup>	cond.	95
Impact strength	(Charpy, -30°C)	ISO 179/1eU	kJ/m <sup>2</sup>	dry	55
		ISO 179/1eU	kJ/m <sup>2</sup>	cond.	50
Notched impact strength	(Charpy, 23°C)	ISO 179/1eA	kJ/m <sup>2</sup>	dry	10
		ISO 179/1eA	kJ/m <sup>2</sup>	cond.	15
Notched impact strength	(Charpy, -30°C)	ISO 179/1eA	kJ/m <sup>2</sup>	dry	9
		ISO 179/1eA	kJ/m <sup>2</sup>	cond.	9
Ball indentation hardness		ISO 2039-1	MPa	dry	230
		ISO 2039-1	MPa	cond.	130
<b>Thermal properties</b>					
Melting point	(DSC)	ISO 11357	°C	dry	260
Heat deflection temperature HDT/A	(1.80 MPa)	ISO 75	°C	dry	250
Heat deflection temperature HDT/B	(0.45 MPa)	ISO 75	°C	dry	*
Heat deflection temperature HDT/C	(8.00 MPa)	ISO 75	°C	dry	220
Thermal expansion coefficient long.	(23 - 80°C)	ISO 11359	10 <sup>-4</sup> /K	dry	0,2
Thermal expansion coefficient trans.	(23 - 80°C)	ISO 11359	10 <sup>-4</sup> /K	dry	1,0
Maximal usage temperature	Long term	EMS	°C	dry	90-120
Maximal usage temperature	Short term	EMS	°C	dry	200
<b>Electrical properties</b>					
Dielectric strength	K20/P50	IEC 243-1	kV/mm	dry	38
		IEC 243-1	kV/mm	cond.	35
Comparative tracking index	CTI	IEC 112	---	dry	575
		IEC 112	---	cond.	550
Volume resistivity		IEC 93	Ω*m	dry	10 <sup>12</sup>
		IEC 93	Ω*m	cond.	10 <sup>11</sup>
Specific surface resistivity		IEC 93	Ω	dry	*
		IEC 93	Ω	cond.	10 <sup>12</sup>
<b>Behaviour towards external influences</b>					
Flammability	(0,8mm)	UL 94	rating		HB
Water absorption	(23°C/sat.)	DIN 53495	%		5
Moisture absorption	(23°C/50%r.F.)	i.A. DIN 53495	%		1,5
<b>Processing properties</b>					
Linear mould shrinkage	long.	ISO 294	%	dry	0,15
Linear mould shrinkage	trans.	ISO 294	%	dry	0,7

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.