

Properties

Mechanical properties		ISO-Nomenclature PA 6, MHRZ, 14-090N, GF 30 X			
Density		ISO 1183	g/cm ³	dry	1,62
Tensile-E-Modulus	(1 mm/min)	ISO 527	MPa	dry	9400
		ISO 527	MPa	cond	5000
Tensile strength at yield	(50 mm/min)	ISO 527	MPa	dry	115
		ISO 527	MPa	cond	80
Elongation at yield	(50 mm/min)	ISO 527	%	dry	3
		ISO 527	%	cond	5
Tensile strength at break	(50 mm/min)	ISO 527	MPa	dry	100
		ISO 527	MPa	cond	80
Elongation at break	(50 mm/min)	ISO 527	%	dry	6
		ISO 527	%	cond	10
Impact strength	(Charpy, 23°C)	ISO 179/1eU	kJ/m ²	dry	50
		ISO 179/1eU	kJ/m ²	cond	60
Impact strength	(Charpy, -30°C)	ISO 179/1eU	kJ/m ²	dry	30
		ISO 179/1eU	kJ/m ²	cond	30
Notched impact strength	(Charpy, 23°C)	ISO 179/1eA	kJ/m ²	dry	8
		ISO 179/1eA	kJ/m ²	cond	10
Notched impact strength	(Charpy, -30°C)	ISO 179/1eA	kJ/m ²	dry	7
		ISO 179/1eA	kJ/m ²	cond	7
Ball indentation hardness		ISO 2039-1	MPa	dry	170
		ISO 2039-1	MPa	cond	80
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	---
Thermal expansion coefficient long.	(23 - 80°C)	ISO 11359	10 ⁻⁴ /K	dry	0,2
Thermal expansion coefficient trans.	(23 – 80°C)	ISO 11359	10 ⁻⁴ /K	dry	1
Maximal usage temperature	long term	EMS	°C	dry	80-100
Maximal usage temperature	short term	EMS	°C	dry	160
Electrical properties					
Dielectric strength	K20/P50	IEC 243-1	kV/mm	dry	---
		IEC 243-1	kV/mm	cond	---
Comparative tracking index	CTI	IEC 112	---	dry	---
		IEC 112	---	cond	---
Volume resistivity		IEC 93	Ω*m	dry	25
		IEC 93	Ω*m	cond	---
Specific surface resistivity		IEC 93	Ω	dry	<10 ⁵
		IEC 93	Ω	cond	---
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	0,15
Linear mould shrinkage	trans.	ISO 294	%	dry	0,65

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

¹⁾ no tensile limit attained

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