

Properties

Mechanical properties		ISO-Nomenclature PA 66+PA6, MHR, 14-060N, GF 15			
Density		ISO 1183	g/cm ³	dry	1,20
Tensile-E-Modulus	(1 mm/min)	ISO 527	MPa	dry	6000
		ISO 527	MPa	cond	4500
Tensile strength at yield	(5 mm/min)	ISO 527	MPa	dry	---
		ISO 527	MPa	cond	---
Elongation at yield	(5 mm/min)	ISO 527	%	dry	---
		ISO 527	%	cond	---
Stress at break	(5 mm/min)	ISO 527	MPa	dry	120
		ISO 527	MPa	cond	85
Strain at break	(5 mm/min)	ISO 527	%	dry	3
		ISO 527	%	cond	5
Impact strength	(Charpy, 23°C)	ISO 179/1eU	kJ/m ²	dry	40
		ISO 179/1eU	kJ/m ²	cond	60
Impact strength	(Charpy, -30°C)	ISO 179/1eU	kJ/m ²	dry	---
		ISO 179/1eU	kJ/m ²	cond	---
Notched impact strength	(Charpy, 23°C)	ISO 179/1eA	kJ/m ²	dry	6
		ISO 179/1eA	kJ/m ²	cond	11
Notched impact strength	(Charpy, -30°C)	ISO 179/1eA	kJ/m ²	dry	---
		ISO 179/1eA	kJ/m ²	cond	---
Ball indentation hardness		ISO 2039-1	MPa	dry	160
		ISO 2039-1	MPa	cond	90
Thermal properties					
Melting point	(DSC)	ISO 11357	°C	dry	260
Heat deflection temperature HDT/A	(1.80 MPa)	ISO 75	°C	dry	210
Heat deflection temperature HDT/B	(0.45 MPa)	ISO 75	°C	dry	---
Heat deflection temperature HDT/C	(8.00 MPa)	ISO 75	°C	dry	80
Thermal expansion coefficient long.	(23 - 80°C)	ISO 11359	10 ⁻⁴ /K	dry	0,3
Thermal expansion coefficient trans.	(23 – 80°C)	ISO 11359	10 ⁻⁴ /K	dry	0,8
Maximal usage temperature	long term	EMS	°C	dry	90-110
Maximal usage temperature	short term	EMS	°C	dry	180
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	---
		IEC 93	Ω*m	cond	---
Specific surface resistivity		IEC 93	Ω	dry	---
		IEC 93	Ω	cond	---
Behaviour towards external influences					
Flammability	(0,8mm)	UL 94	rating		HB
Water absorption	(23°C/sat.)	DIN 53495	%		6
Moisture absorption	(23°C/50%r.F.)	i.A. DIN 53495	%		2,5
Processing properties					
Linear mould shrinkage	long.	ISO 294	%	dry	0,25
Linear mould shrinkage	trans.	ISO 294	%	dry	0,75

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

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