

Properties

Mechanical properties		ISO-Nomenclature PA 66+PA 6, MHRs, 14-090N			
Density		ISO 1183	g/cm ³	dry	1,18
Tensile-E-Modulus	(1 mm/min)	ISO 527	MPa	dry	9200
		ISO 527	MPa	cond	6500
Tensile strength at yield	(50 mm/min)	ISO 527	MPa	dry	¹⁾
		ISO 527	MPa	cond	---
Elongation at yield	(50 mm/min)	ISO 527	%	dry	¹⁾
		ISO 527	%	cond	---
Tensile strength at break	(50 mm/min)	ISO 527	MPa	dry	170
		ISO 527	MPa	cond	120
Elongation at break	(50 mm/min)	ISO 527	%	dry	3
		ISO 527	%	cond	7
Impact strength	(Charpy, 23°C)	ISO 179/1eU	kJ/m ²	dry	50
		ISO 179/1eU	kJ/m ²	cond	80
Impact strength	(Charpy, -30°C)	ISO 179/1eU	kJ/m ²	dry	40
		ISO 179/1eU	kJ/m ²	cond	40
Notched impact strength	(Charpy, 23°C)	ISO 179/1eA	kJ/m ²	dry	5
		ISO 179/1eA	kJ/m ²	cond	12
Notched impact strength	(Charpy, -30°C)	ISO 179/1eA	kJ/m ²	dry	4
		ISO 179/1eA	kJ/m ²	cond	4
Ball indentation hardness		ISO 2039-1	MPa	dry	---
		ISO 2039-1	MPa	cond	---
Thermal properties					
Melting point	(DSC)	ISO 11357	°C	dry	260
Heat deflection temperature HDT/A	(1.80 MPa)	ISO 75	°C	dry	240
Heat deflection temperature HDT/B	(0.45 MPa)	ISO 75	°C	dry	---
Heat deflection temperature HDT/C	(8.00 MPa)	ISO 75	°C	dry	110
Thermal expansion coefficient long.	(23 - 80°C)	ISO 11359	10 ⁻⁴ /K	dry	---
Thermal expansion coefficient trans.	(23 - 80°C)	ISO 11359	10 ⁻⁴ /K	dry	---
Maximal usage temperature	long term	EMS	°C	dry	90-120
Maximal usage temperature	short term	EMS	°C	dry	200
Electrical properties					
Dielectric strength	K20/P50	IEC 243-1	kV/mm	dry	6
		IEC 243-1	kV/mm	cond	6
Comparative tracking index	CTI	IEC 112	---	dry	---
		IEC 112	---	cond	---
Volume resistivity		IEC 93	Ω*m	dry	10 ⁶
		IEC 93	Ω*m	cond	10 ⁶
Specific surface resistivity		IEC 93	Ω	dry	*
		IEC 93	Ω	cond	10 ⁷
Behaviour towards external influences					
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
Processing properties					
Linear mould shrinkage	long.	ISO 294	%	dry	0,05
Linear mould shrinkage	trans.	ISO 294	%	dry	0,60

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.