

TECHNICAL DATA SHEET

Endur® 1100 GF20

Endur® 1100 GF20 is a general purpose, 20% glass reinforced polybutylene terephthalate with a good balance of mechanical properties and processability.

Properties	Test method	Unit	Value
Contents of reinforcement materials	-	%	20
Density	ISO 1183	g/cm ³	1,45
Melt volume flow rate (250°C/2,16kg)	ISO 1133	cm ³ /10 min	12
Viscosity number	ISO 1628-5	cm ³ /g	118
Waterabsorption up to saturation (23°C)	ISO 62	%	0,4
Moisture absorption (24h 23°C)	ISO 62	%	0,2
Molding shrinkage (longitudinal) (260°C/WZ 80°C)	ISO 2577	%	0,3
Molding shrinkage (transverse) (600 bar)	ISO 2577	%	1,1
Tensile modulus (1 mm/min)	ISO 527	MPa	7400
Stress at break (5 mm/min)	ISO 527	MPa	130
Strain at break (5 mm/min)	ISO 527	%	3
Flexural modulus (2 mm/min)	ISO 178	MPa	6500
Flexural strength (2 mm/min)	ISO 178	MPa	190
Flexural strain at flexural strength (2 mm/min)	ISO 178	%	4,5
Flexural stress at 3,5% strain (2 mm/min)	ISO 178	MPa	165

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Properties	Test method	Unit	Value
Charpy impact strength (23°C)	ISO 179-1eU	kJ/m ²	50
Charpy impact strength (-30°C)	ISO 179-1eU	kJ/m ²	45
Charpy notched impact strength (23°C)	ISO 179-1eA	kJ/m ²	8
Charpy notched impact strength (-30°C)	ISO 179-1eA	kJ/m ²	7
Ball indentation (358 N)	ISO 2039-1	N/mm ²	190
Melting temperature (10°C/min)	ISO 11357	°C	220 225
Temp. of deflection under load (HDT A) (1,80 MPa)	ISO 75	°C	205
Temp. of deflection under load (HDT B) (0,45 MPa)	ISO 75	°C	220
Temp. of deflection under load (HDT C) (8,00 MPa)	ISO 75	°C	95
Vicat softening temperature (50 N, 50°C/h)	ISO 306	°C	215
Coeff. of linear therm. expansion (longitudinal) (23 - 80°C)	ISO 11359	10 ⁻⁴ /k	0,35
Coeff. of linear therm. expansion (transverse) (23 - 80°C)	ISO 11359	10 ⁻⁴ /k	0,9
Flammability test (0,80 mm)	TC	Klasse / Classificat.	HB
Glow wire flammability index (2,0 mm)	IEC 60695-2-12	°C	650