Stanyl®

Stanyl® TC170

PA46-GF20

Thermal conductive material, 20% Glass Reinforced, Laser Markable

Print Date: 2019-10-15

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.25 / *	%	ISO 294-4
Molding shrinkage (normal)	0.6 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	12500 / 7100	MPa	ISO 527-1/-2
Stress at break	130 / 80	MPa	ISO 527-1/-2
Strain at break	2.5 / 5.2	%	ISO 527-1/-2
Flexural modulus	12000 / 7200	MPa	ISO 178
Flexural strength	200 / 135	MPa	ISO 178
Charpy impact strength (+23°C)	55 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	9 / 13	kJ/m²	ISO 179/1eA
Thermal properties	dry / cond		
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.9 / *	E-4/°C	ISO 11359-1/-2
Thermal conductivity in plane	2.1	W/(m K)	ASTM E1461
Thermal conductivity through plane	0.9	W/(m K)	ASTM E1461
Electrical properties	dry / cond		
Volume resistivity	>1E13 / 4E12	Ohm*m	IEC 60093
Comparative tracking index	350 / -	V	IEC 60112

Property Data

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Properties	Typical Data	Unit	Test Method
Other properties	dry / cond		
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1550 / -	kg/m³	ISO 1183