

Stanyl® 46HF5145

PA46-GF43 FR

43% Glass Reinforced, Flame Retardant, for E&E applications

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage [parallel]	0.3 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	0.85 / *	%	Sim. to ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	16000 / 11500	MPa	ISO 527-1/-2
Tensile modulus (120°C)	10000 / -	MPa	ISO 527-1/-2
Tensile modulus (160°C)	7300	MPa	ISO 527-1/-2
Stress at break	210 / 160	MPa	ISO 527-1/-2
Stress at break (120°C)	120 / -	MPa	ISO 527-1/-2
Stress at break (160°C)	100	MPa	ISO 527-1/-2
Strain at break	1.8 / 3	%	ISO 527-1/-2
Strain at break (120°C)	3.3 / -	%	ISO 527-1/-2
Strain at break (160°C)	4.5	%	ISO 527-1/-2
Flexural modulus	14500 / 11000	MPa	ISO 178
Flexural modulus (120°C)	9500	MPa	ISO 178
Flexural modulus (160°C)	7200	MPa	ISO 178
Flexural strength	310 / 250	MPa	ISO 178
Flexural strength (120°C)	200	MPa	ISO 178
Flexural strength (160°C)	140	MPa	ISO 178
Charpy impact strength (+23°C)	50 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	14 / 18	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	16 / -	kJ/m ²	ISO 180/1A



Property Data

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Thermal properties			
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	280 / *	°C	ISO 75-1/-2
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Relative Temperature Index - electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	3	mm	UL746B
Other properties			
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1730 / -	kg/m ³	ISO 1183

