

Stanyl® 46SF5030

PA46-GF30 FR(17)

30% Glass Reinforced, Heat Stabilized, Flame Retardant, High Flow

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage [parallel]	0.4 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.1 / *	%	Sim. to ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	12000 / 7500	MPa	ISO 527-1/-2
Stress at break	170 / 110	MPa	ISO 527-1/-2
Strain at break	1.9 / 2.8	%	ISO 527-1/-2
Flexural modulus	11000 / 6800	MPa	ISO 178
Flexural strength	240 / 165	MPa	ISO 178
Charpy impact strength (+23°C)	40 / 40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 13	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 12	kJ/m ²	ISO 179/1eA
Thermal properties			
	dry / cond		
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	290 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	290 / *	°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)	0.45 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10



Property Data

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Properties	Typical Data	Unit	Test Method
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Relative Temperature Index - electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	0.35	mm	UL746B

Electrical properties

dry / cond

Volume resistivity	>1E13 / 1E8	Ohm*m	IEC 62631-3-1
Electric strength	30 / 20	kV/mm	IEC 60243-1
Comparative tracking index	225 / -	V	IEC 60112
Relative permittivity (100Hz)	4.3 / -	-	IEC 62631-2-1
Relative permittivity (1 MHz)	4 / -	-	IEC 62631-2-1

Other properties

dry / cond

Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1680 / -	kg/m ³	ISO 1183

