Stanyl®

Stanyl® HFX61S

PA46-GF35 FR(40)

35% Glass Reinforced, High Flow, Halogen free and free of red phosphorous

Print Date: 2019-10-10

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	11500 / 8000	MPa	ISO 527-1/-2
Stress at break	145 / 100	MPa	ISO 527-1/-2
Strain at break	2.1 / 3.1	%	ISO 527-1/-2
Flexural modulus	10500 / 8000	MPa	ISO 178
Flexural strength	210 / 200	MPa	ISO 178
Charpy impact strength (+23°C)	50 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	9 / 10	kJ/m²	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)	285 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.17 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.7 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (parallel)	0.3	E-4/°C	ASTM D696
Coeff. of linear therm. expansion (normal)	0.4	E-4/°C	ASTM D696
Burning Behav. at 1.5 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.18 / *	mm	IEC 60695-11-10

Property Data

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Properties	Typical Data	Unit	Test Method
Relative Temperature Index - electrical	120	°C	UL746B
RTI electrical (Thickness (1) tested)	0.18	mm	UL746B
Electrical properties	dry / cond		
Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 60093
Electric strength	30 / 24	kV/mm	IEC 60243-1
Comparative tracking index	550 / -	V	IEC 60112
Relative permittivity (100Hz)	4.4 / 11	-	IEC 60250
Relative permittivity (1 MHz)	4.1 / 5	-	IEC 60250
Relative permittivity (1GHz)	3.9 / 4.1	-	IEC 60250
Relative permittivity (10GHz)	3.8 / 4	-	IEC 60250
Other properties	dry / cond		
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1490 / -	kg/m³	ISO 1183