

Stanyl® TC153

PA46 FR(17)

Thermal conductive material, Flame Retardant, Heat Stabilized

Print Date: 2018-12-13

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage [parallel]	0.3 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	0.3 / *	%	Sim. to ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	12500 / -	MPa	ISO 527-1/-2
Stress at break	55 / -	MPa	ISO 527-1/-2
Strain at break	0.6 / -	%	ISO 527-1/-2
Charpy notched impact strength (+23°C)	2 / -	kJ/m ²	ISO 179/1eA
Thermal properties			
	dry / cond		
Coeff. of linear therm. expansion (parallel)	0.25 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.25 / *	E-4/°C	ISO 11359-1/-2
Thermal conductivity in plane	8	W/(m K)	ASTM E1461
Thermal conductivity through plane	1	W/(m K)	ASTM E1461
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 thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Relative Temperature Index - electrical	140	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B

Properties	Typical Data	Unit	Test Method
Electrical properties			
	dry / cond		
Volume resistivity	1E13 / -	Ohm*m	IEC 60093
Electric strength	30 / -	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	V	IEC 60112
Other properties			
	dry / cond		
Humidity absorption	0.9 / *	%	Sim. to ISO 62
Density	1630 / -	kg/m ³	ISO 1183