

Stanyl[®] TC155

PA* FR(17)

Thermal conductive material, Flame Retardant, Heat Stabilized

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	11000 / –	MPa	ISO 527-1/-2
Tensile modulus (120°C)	2600 / –	MPa	ISO 527-1/-2
Tensile modulus (160°C)	1700	MPa	ISO 527-1/-2
Stress at break	55 / –	MPa	ISO 527-1/-2
Stress at break (120°C)	20 / –	MPa	ISO 527-1/-2
Stress at break (160°C)	15	MPa	ISO 527-1/-2
Strain at break	0.6 / –	%	ISO 527-1/-2
Strain at break (120°C)	2.8 / –	%	ISO 527-1/-2
Strain at break (160°C)	2.4	%	ISO 527-1/-2
Charpy impact strength (+23°C)	10 / –	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	10 / –	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	2 / 1.2	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	1.6 / 1.1	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES			
	DRY / COND		
Temp. of deflection under load (1.80 MPa)	157 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	211 / *	°C	ISO 75-1/-2
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



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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Thermal conductivity in plane	5	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 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	—	—
ELECTRICAL PROPERTIES			
	DRY / COND		
Electric strength	36 / —	kV/mm	IEC 60243-1
Comparative tracking index	575 / —	V	IEC 60112
Relative permittivity (10GHz)	3.89 / —	—	IEC 61189-2-721
OTHER PROPERTIES			
	DRY / COND		
Density	1630 / —	kg/m³	ISO 1183

