


**Stanyl® ForTii™ T11**

PA4T-GF30 FR(40)

DSM Engineering Plastics

**Product Texts**

30% Glass Reinforced, Flame Retardant, Halogen free and free of red phosphorous

ISO 1043 PA4T-GF30 FR(40)

[Stanyl ForTii website](#)

Rheological properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	12000 / -	MPa	ISO 527-1/-2
Stress at break	160 / -	MPa	ISO 527-1/-2
Strain at break	2.1 / -	%	ISO 527-1/-2
Charpy impact strength (+23°C)	60 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / -	kJ/m²	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature (10°C/min)	325 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	125 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	305 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	323 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	22 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	50 / *	E-6/K	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	UL / *	-	-
Burning behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.2 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 100Hz	4.2 / 4.2	-	IEC 60250
Relative permittivity, 1MHz	3.9 / 3.9	-	IEC 60250
Dissipation factor, 100Hz	64 / 64	E-4	IEC 60250
Dissipation factor, 1MHz	176 / 176	E-4	IEC 60250
Volume resistivity	>1E13 / -	Ohm*m	IEC 60093
Surface resistivity	* / >1E15	Ohm	IEC 60093
Electric strength	33 / 33	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
<b>Other properties</b>			
<b>ISO Data</b>			
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m³	ISO 1183

**Characteristics**

Processing

Injection Molding

Special Characteristics

Flame retardant

Delivery form

Granules