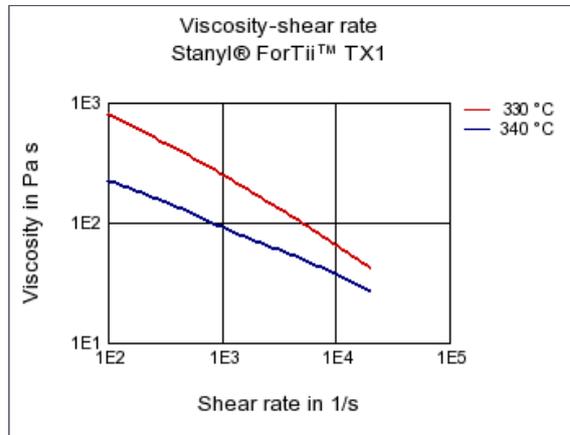




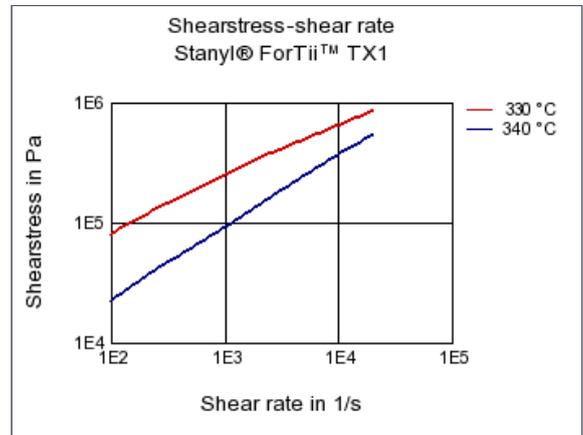
<b>Stanyl® ForTii™ TX1</b>			
PA4T-GF30 FR(40)		DSM Engineering Plastics	
<b>Product Texts</b>			
30% Glass Reinforced, Flame Retardant, Halogen free and free of red phosphorous			
ISO 1043 PA4T-GF30 FR(40)			
<b>Rheological properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577
<b>Mechanical properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Tensile Modulus	12000 / 12000	MPa	ISO 527-1/-2
Stress at break	155 / 155	MPa	ISO 527-1/-2
Strain at break	2 / 2	%	ISO 527-1/-2
Charpy impact strength (+23°C)	50 / 50	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 10	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>		<b>dry / cond</b>	<b>Unit</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	35 / *	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	0.3 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Oxygen index	39 / *	%	ISO 4589-1/-2
<b>Electrical properties</b>		<b>dry / cond</b>	<b>Unit</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
Electric strength	33 / 33	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112
<b>Other properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Water absorption	4.6 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m <sup>3</sup>	ISO 1183
<b>Material specific properties</b>		<b>dry / cond</b>	<b>Unit</b>
<b>ISO Data</b>			
Viscosity number	86 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628

Diagrams

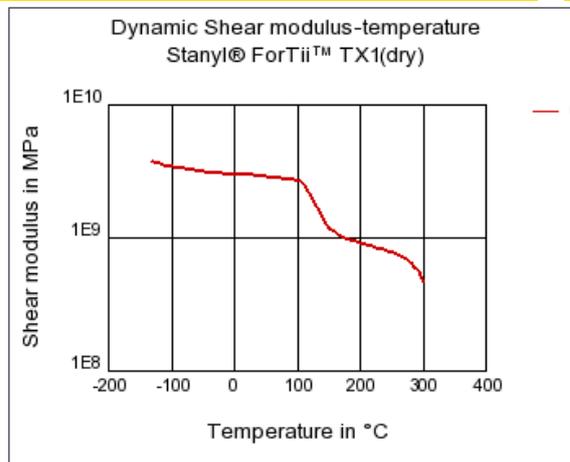
Viscosity-shear rate



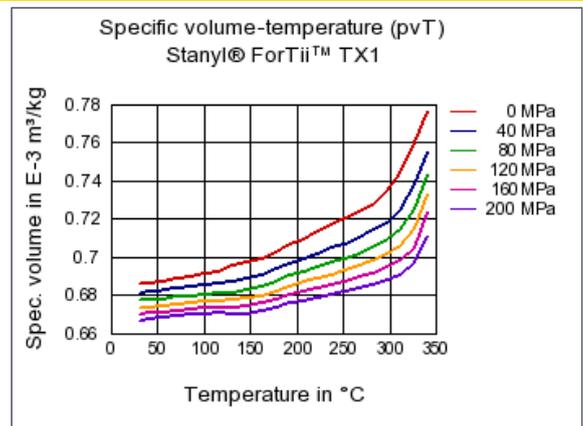
Shearstress-shear rate



Dynamic Shear modulus-temperature



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant

Delivery form

Granules