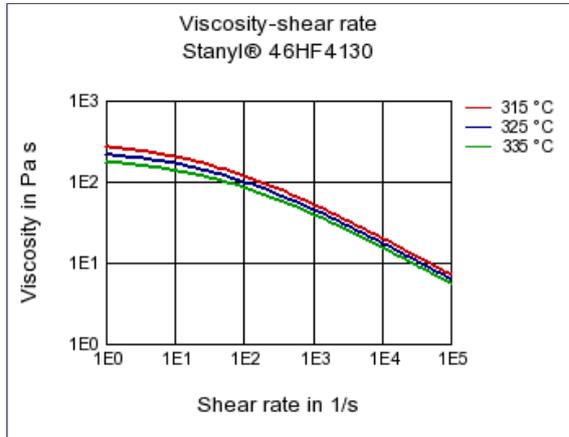




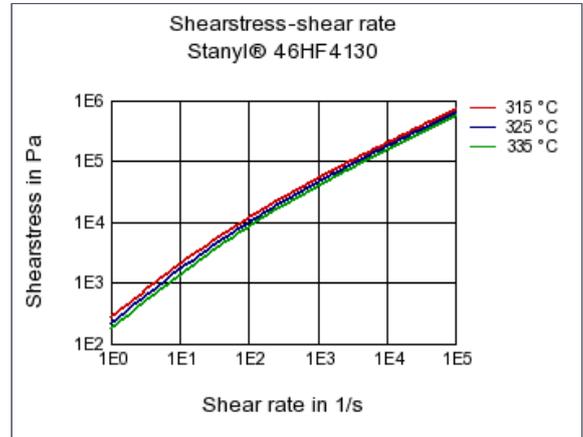
<b>Stanyl® 46HF4130</b>			
<b>PA46-GF30</b>		DSM Engineering Plastics	
<b>Product Texts</b>			
30% Glass Reinforced, Heat Stabilized, High Flow			
ISO 1043 PA46-GF30			
<b>Mechanical properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	10000 / 6000	MPa	ISO 527-1/-2
Stress at break	210 / 115	MPa	ISO 527-1/-2
Strain at break	3 / 6	%	ISO 527-1/-2
Tensile creep modulus, 1000h	* / 4800	MPa	ISO 899-1
Charpy impact strength (+23°C)	60 / 90	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	60 / 60	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 17	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	12 / 12	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	75 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	290 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	290 / *	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	290 / *	°C	ISO 306
Coeff. of linear therm. expansion, parallel	25 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	60 / *	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Oxygen index	22 / *	%	ISO 4589-1/-2
<b>Other properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Water absorption	9.5 / *	%	Sim. to ISO 62
Humidity absorption	2.6 / *	%	Sim. to ISO 62
Density	1410 / -	kg/m <sup>3</sup>	ISO 1183
<b>Material specific properties</b>			
	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Viscosity number	85 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628
<b>Rheological calculation properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Density of melt	1190	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.367	W/(m K)	-
Spec. heat capacity of melt	2290	J/(kg K)	-
Eff. thermal diffusivity	1.31E-7	m <sup>2</sup> /s	-

Diagrams

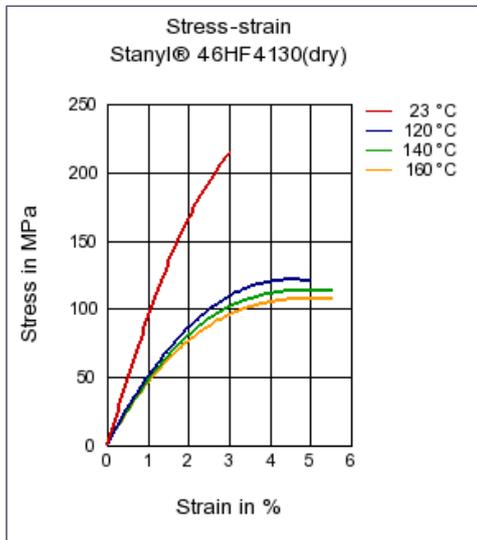
Viscosity-shear rate



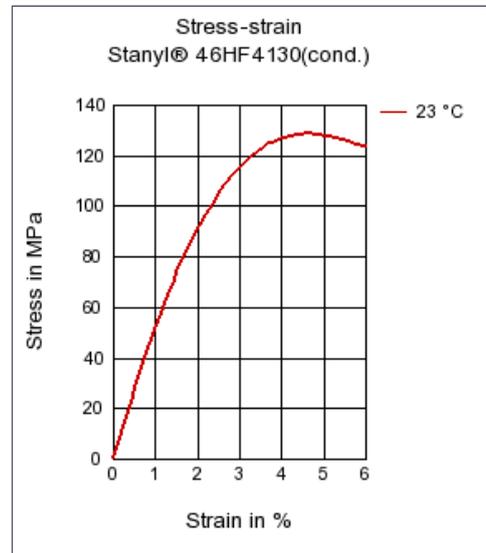
Shearstress-shear rate



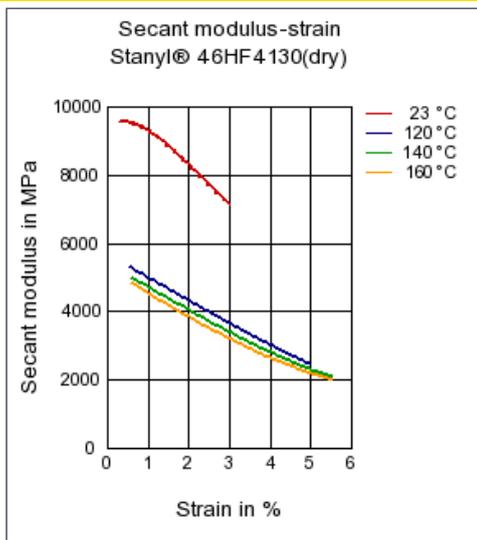
Stress-strain



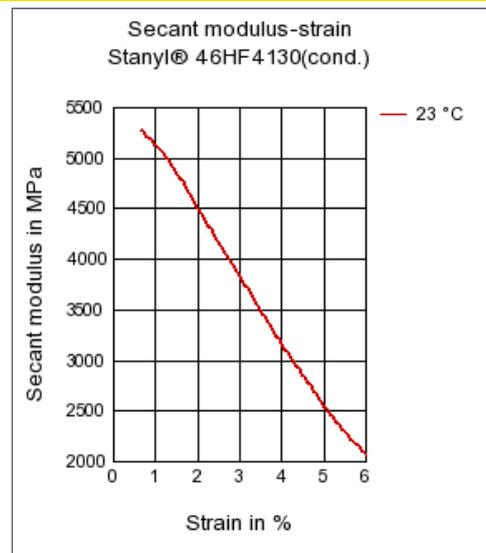
Stress-strain



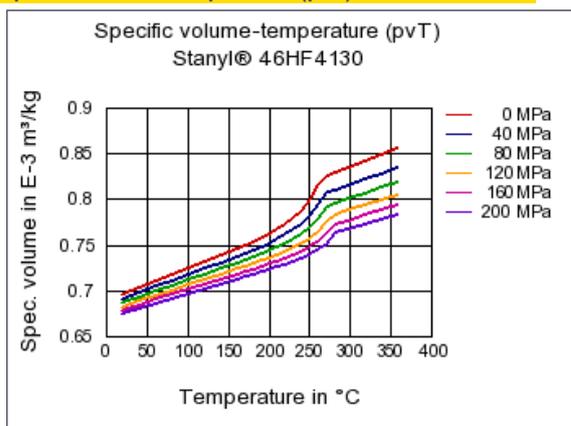
Secant modulus-strain



Secant modulus-strain



**Specific volume-temperature (pvT)**



**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Heat stabilized or stable to heat

**Additives**

Lubricants, Release agent

**Other text information**

**Injection Molding**

[Injection Molding Recommendations](#)