



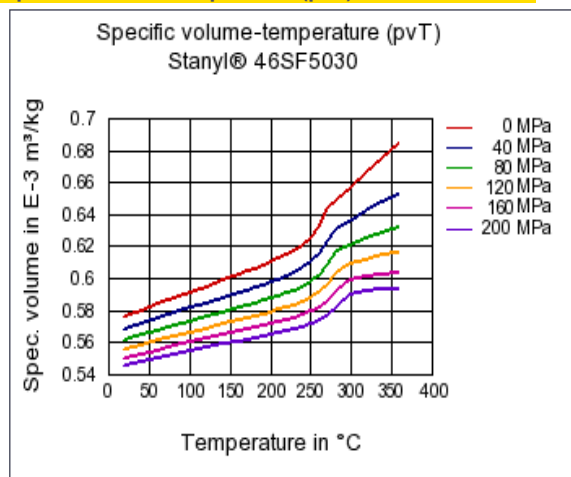
Stanyl® 46SF5030			
PA46-GF30 FR(17)			Envalior
Product Texts			
30% Glass Reinforced, Heat Stabilized, Flame Retardant, High Flow			
ISO 1043 PA46-GF30 FR(17)			
Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	12000 / 7500	MPa	ISO 527
Stress at break	170 / 110	MPa	ISO 527
Strain at break	1.9 / 2.8	%	ISO 527
Charpy impact strength, +23°C	40 / 40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	13 / 13	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	12 / 12	kJ/m ²	ISO 179/1eA
Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
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	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	45 / *	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	-
Yellow Card available	yes / *	-	-
Burning behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	3.0 / *	mm	-
Yellow Card available	yes / *	-	-
Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.3 / -	-	IEC 62631-2-1
Relative permittivity, 1MHz	4 / -	-	IEC 62631-2-1
Dissipation factor, 100Hz	60 / -	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	160 / -	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / 1E8	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric strength	30 / 20	kV/mm	IEC 60243-1
Comparative tracking index	225 / -	-	IEC 60112
Other properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	5.8 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1680 / -	kg/m ³	ISO 1183
Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	66 / *	cm ³ /g	ISO 307, 1157, 1628
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			

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Density of melt	1450	kg/m ³	-
Thermal conductivity of melt	0.258	W/(m K)	-
Spec. heat capacity of melt	1750	J/(kg K)	-
Eff. thermal diffusivity	1.01E-7	m ² /s	-

Diagrams

Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Additives

Lubricants, Release agent

Delivery form

Pellets

Special Characteristics

Flame retardant, Platable, Heat stabilized or stable to heat

Other text information

Injection Molding

[Injection Molding Recommendations](#)

[Hot runner recommendations for molding high heat performance Engineering Materials](#)

[Steel recommendations for molds screws and barrels](#)

[Trouble shooting guideline for injection molding](#)

Chemical Media Resistance

Alcohols

😊 Ethanol (23°C)

Hydrocarbons

😊 Toluene (23°C)

Ketones

😊 Acetone (23°C)

Ethers

😊 Diethyl ether (23°C)

Other

😊 Ethyl Acetate (23°C)

😊 Water (23°C)