

## TER Plastics



Envalior

Stanyl® TE250F8 PA46-GF40 FR(17)

## Product Texts

## 40% Glass Reinforced, Heat Stabilized, Flame Retardant

ISO 1043 PA46-GF40 FR(17)			
Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	16000 / 10500	MPa	ISO 527
Stress at break	190 / 120	MPa	ISO 527
Strain at break	1.9 / 2.7	%	ISO 527
Charpy impact strength, +23°C	50 / 50	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	40 / 40	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	13 / 13	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	13 / 13	kJ/m²	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	25 / *	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	-
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 / *	-	-
Oxygen index	37 / *	%	ISO 4589-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.3 / 12	-	IEC 62631-2-1
Relative permittivity, 1MHz	4 / 4.5	-	IEC 62631-2-1
Dissipation factor, 100Hz	60 / 3300	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	160 / 700	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	325 / -	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	4.6 / *	%	Sim. to ISO 62
Humidity absorption	1.3 / *	%	Sim. to ISO 62
Density	1760 / -	kg/m³	ISO 1183
Material specific properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	150 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628

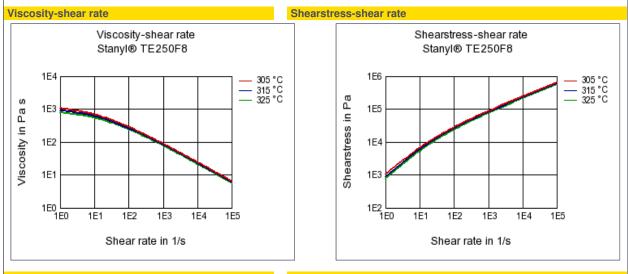
Created: 2025-03-14 Source: www.materialdatacenter.com

Our product information and suggestions are based on analyses, empirical values, and data from the product manufacturer in question and are therefore provided with our best knowledge and accountability. We do not, however, assume any liability or warranty, be it for defects in title, quality and suitability of the products for a specific purpose, or non-infringement of industrial property rights. We do not warrant the use or processing of the products and information, or consequences of any kind arising from product descriptions, suggestions, and recommendations. The responsibility for appropriate usage, as well as final suitability testing of the raw material is exclusively the responsibility of the customer as part of sampling/final qualification of a manufactured molded part. The specified data are only indicative and are not to be interpreted as legally binding specifications.

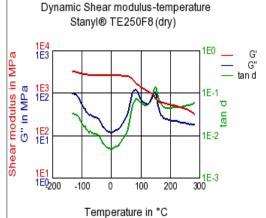
Page: 1/4

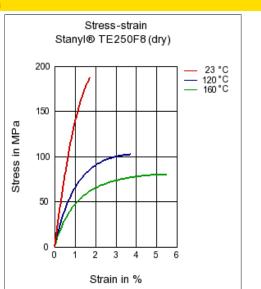
Stanyl® TE250F8 PA46-GF40 FR(17)			Envalior
Rheological calculation properties	Value	Unit	Test Standard
Density of melt	1570	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.353	W/(m K)	-
Spec. heat capacity of melt	1630	J/(kg K)	-
Eff. thermal diffusivity	1.41E-7	m²/s	-

Diagrams



Dynamic Shear modulus-temperature Stress-strain





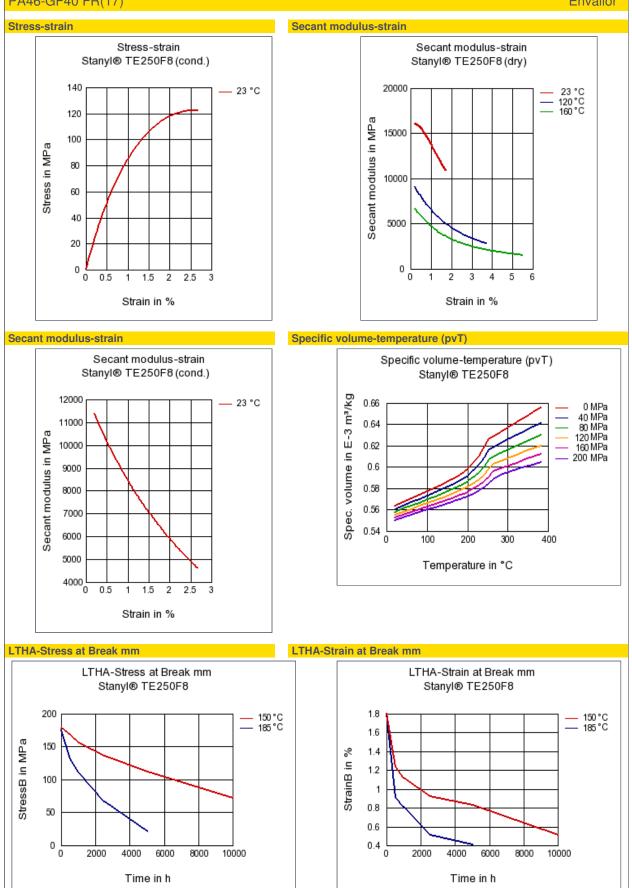
Created: 2025-03-14 Source: www.materialdatacenter.com

Page: 2/4

Our product information and suggestions are based on analyses, empirical values, and data from the product manufacturer in question and are therefore provided with our best knowledge and accountability. We do not, however, assume any liability or warranty, be it for defects in title, quality and suitability of the products for a specific purpose, or non-infringement of industrial property rights. We do not warrant the use or processing of the products and information, or consequences of any kind arising from product descriptions, suggestions, and recommendations. The responsibility for appropriate usage, as well as final suitability testing of the raw material is exclusively the responsibility of the customer as part of sampling/final qualification of a manufactured molded part. The specified data are only indicative and are not to be interpreted as legally binding specifications.

## Stanyl® TE250F8 PA46-GF40 FR(17)





Created: 2025-03-14 Source: www.materialdatacenter.com

Page: 3/4

Our product information and suggestions are based on analyses, empirical values, and data from the product manufacturer in question and are therefore provided with our best knowledge and accountability. We do not, however, assume any liability or warranty, be it for defects in title, quality and suitability of the products for a specific purpose, or non-infringement of industrial property rights. We do not warrant the use or processing of the products and information, or consequences of any kind arising from product descriptions, suggestions, and recommendations. The responsibility for appropriate usage, as well as final suitability testing of the raw material is exclusively the responsibility of the customer as part of sampling/final qualification of a manufactured molded part. The specified data are only indicative and are not to be interpreted as legally binding specifications.

PA46-GF40 FR(17)       E         Characteristics       Additives         Processing       Additives         Injection Molding       Lubricants, Release agent         Delivery form       Special Characteristics         Pellets       Flame retardant, Platable, Heat stabilized or stable to heat	nvalior
Processing     Additives       Injection Molding     Lubricants, Release agent       Delivery form     Special Characteristics	
Injection Molding     Lubricants, Release agent       Delivery form     Special Characteristics	
Delivery form Special Characteristics	
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 Supporting document for Stanyl quality processing	
Trouble shooting guideline for injection molding	
Chemical Media Resistance	
Alcohols	
🙂 Ethanol (23 °C)	
Hydrocarbons	
Toluene (23°C)	
Ketones       Output       Acetone (23°C)	
Ethers Uethyl ether (23°C)	
Other	
••         ••         ••	
Created: 2025-03-14 Source: www.materialdatacenter.com	Page: 4/4

Prage. 4/4 Our product information and suggestions are based on analyses, empirical values, and data from the product manufacturer in question and are therefore provided with our best knowledge and accountability. We do not, however, assume any liability or warranty, be it for defects in title, quality and suitability of the products for a specific purpose, or noninfringement of industrial property rights. We do not warrant the use or processing of the products and information, or consequences of any kind arising from product descriptions, suggestions, and recommendations. The responsibility for appropriate usage, as well as final suitability testing of the raw material is exclusively the responsibility of the customer as part of sampling/final qualification of a manufactured molded part. The specified data are only indicative and are not to be interpreted as legally binding specifications.