

TECHNICAL DATA SHEET

Arnite® TV4 230 SF

Envalior
PBT-GF15 FR(17)

Processing

Injection molding

Delivery Form

Pellets

Additives

Release agent

Special Characteristics

Flame retardant

Product Text

Product Information

15% Glass Reinforced, Flame Retardant, High Flow

ISO 1043 PBT-GF15 FR(17)

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	7	cm ³ /10min	ISO 1133
Temperature	250	°C	
Load	2.16	kg	
Molding shrinkage, parallel	0.9	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Standard
Tensile modulus	7000	MPa	ISO 527
Stress at break	105	MPa	ISO 527
Strain at break	2.9	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	35	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	25	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3

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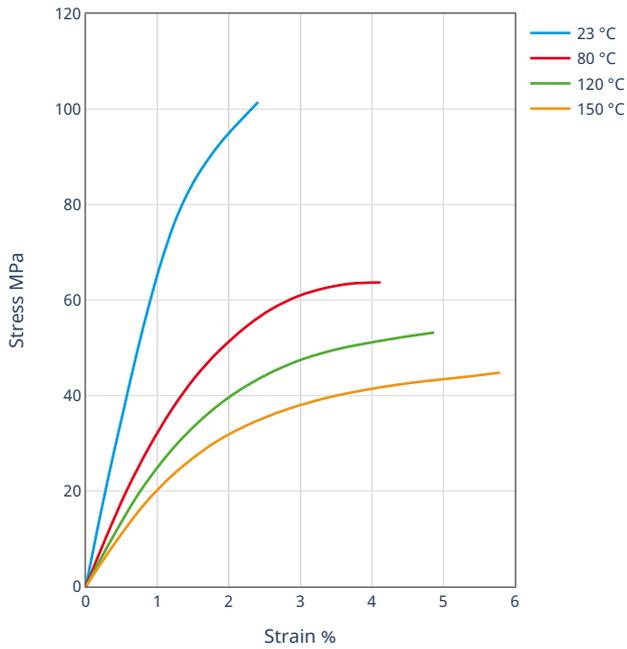
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	200	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	215	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	50	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	80	E-6/K	ISO 11359-1/-2
Burning 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	mm	
Yellow card available	yes		
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	1.5	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.7		IEC 62631-2-1
Relative permittivity, 1MHz	3.5		IEC 62631-2-1
Dissipation factor, 100Hz	25	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	140	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	250		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1560	kg/m ³	ISO 1183

Diagrams

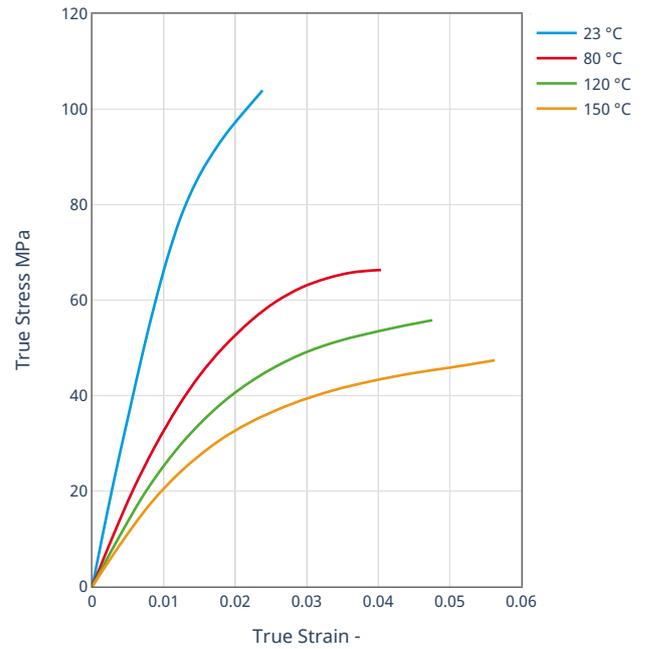
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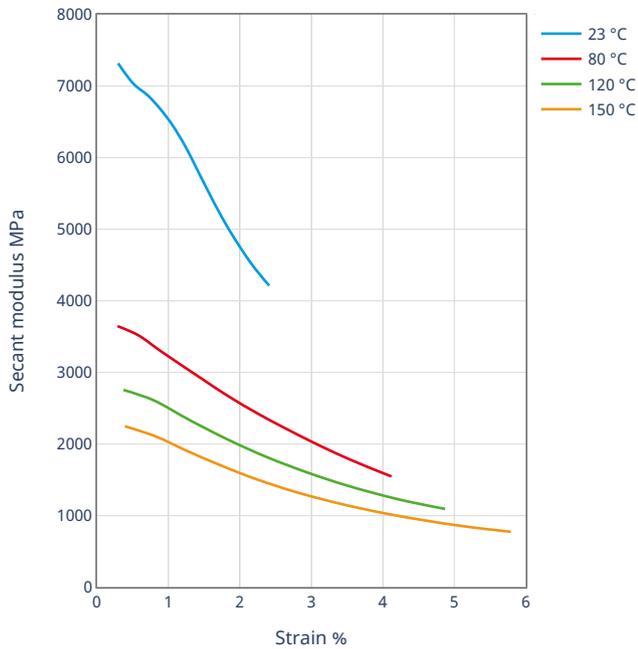
Stress-strain



True stress-true strain



Secant modulus-strain



Processing Information

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Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Supporting document for Stanyl quality processing