

TECHNICAL DATA SHEET

Arnite® T08 200

Envalior
PBT

Processing

Injection molding, Film extrusion, Other extrusion

Pellets

Certifications

Food contact

Delivery Form

Product Text

Product Information

High Viscosity, Injection Molding, Extrusion, Food Contact Quality

ISO 1043 PBT

Processing/Physical Characteristics	Value	Unit	Standard
Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	250	°C	
Load	2.16	kg	
Density of melt	1040	kg/m ³	
Thermal conductivity of melt	0.109	W/(m K)	
Spec. heat capacity of melt	2260	J/(kg K)	
Eff. thermal diffusivity	4.65E-8	m ² /s	
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2550	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	3.5	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Poisson's ratio	0.35		ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	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

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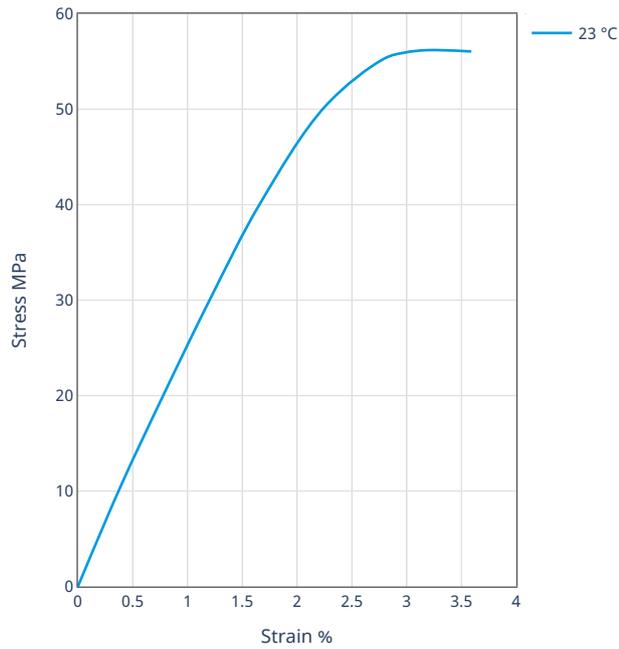
Thermal Properties	Value	Unit	Standard
Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	55	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	170	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90	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	
Yellow card available	yes		
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3	mm	
Yellow card available	yes		
Electrical Properties	Value	Unit	Standard
Relative permittivity, 100Hz	3.5		IEC 62631-2-1
Relative permittivity, 1MHz	3.2		IEC 62631-2-1
Dissipation factor, 100Hz	20	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	200	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	27	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112
Other Properties	Value	Unit	Standard
Water absorption	0.45	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1300	kg/m ³	ISO 1183

Diagrams

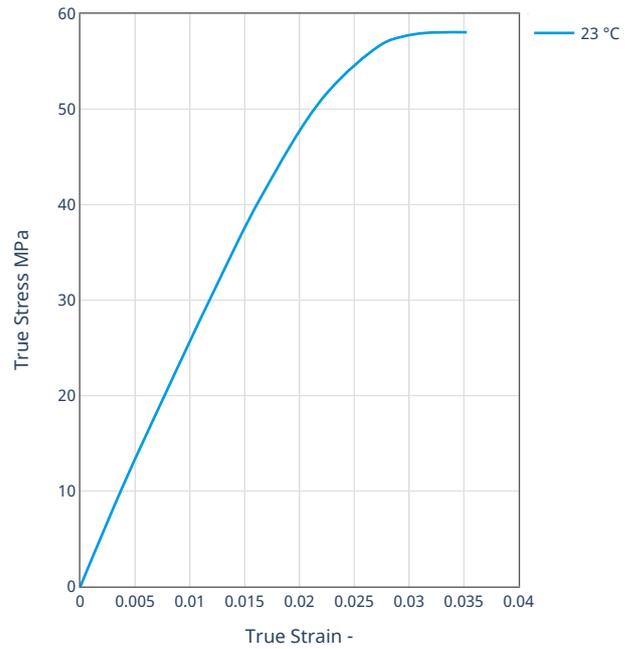
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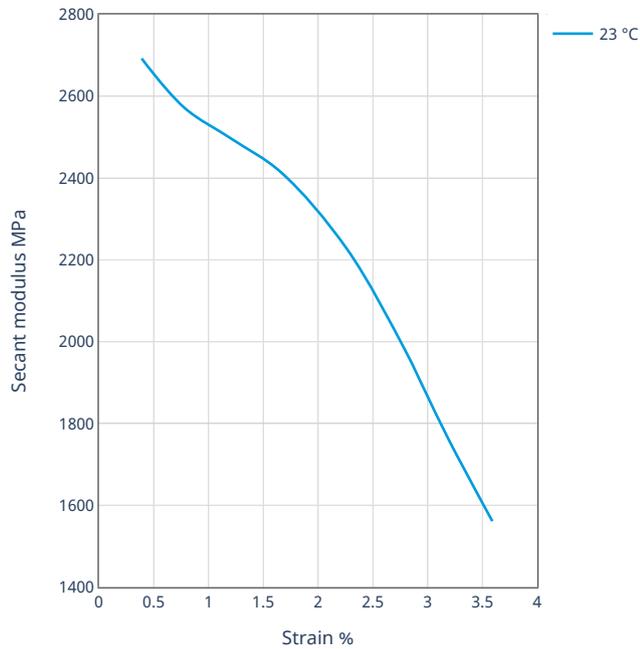
Stress-strain



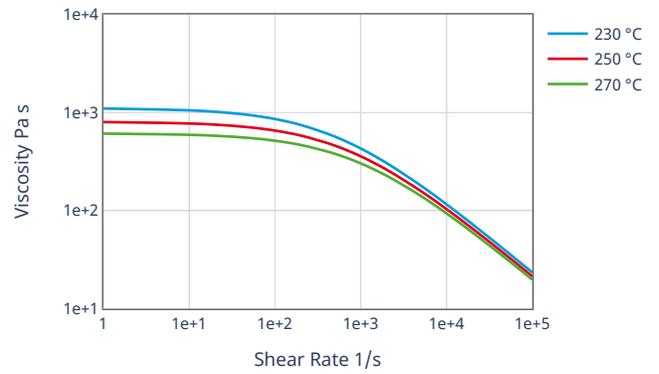
True stress-true strain



Secant modulus-strain



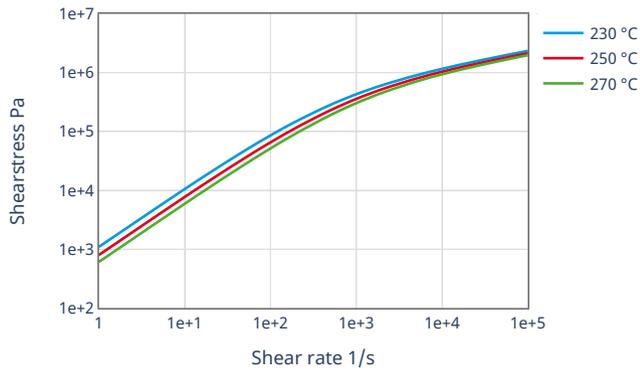
Viscosity-shear rate



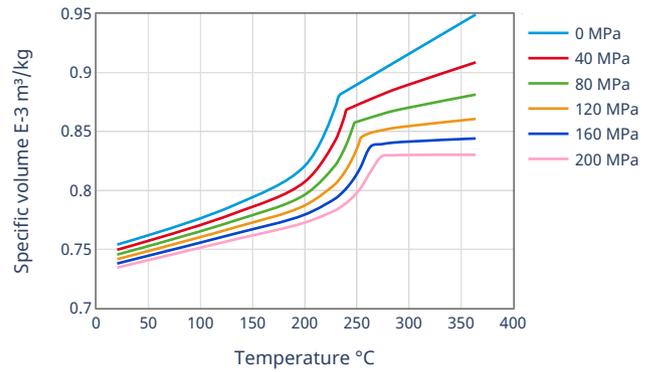
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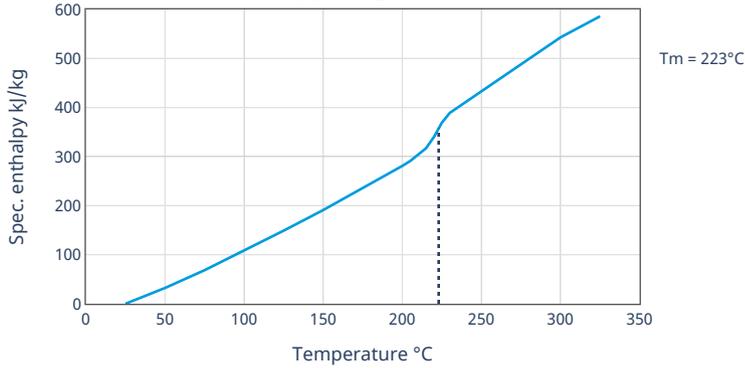
Shearstress-shear rate



Spec. volume-Temperature (pVT)



Spec. enthalpy/mass-temp. (DSC)
->Arnite® T06 200



Processing Information

Injection molding

Injection Molding Recommendations

Steel recommendations for molds screws and barrels

Supporting document for Stanyl quality processing

Film extrusion

Extrusion Guideline for Arnite® T-grades