


Arnite® TV4 270
PBT-GF35

DSM Engineering Plastics

Product Texts

35% Glass Reinforced

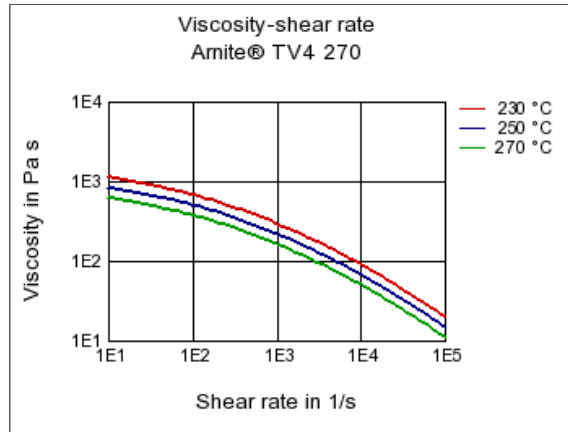
ISO 1043 PBT-GF35

[Arnite website](#)

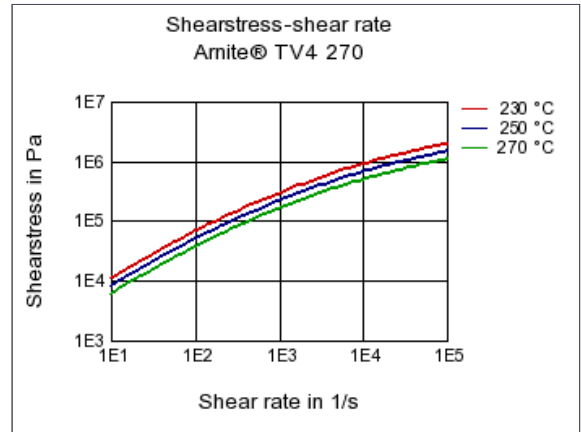
Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11500	MPa	ISO 527-1/-2
Stress at break	145	MPa	ISO 527-1/-2
Strain at break	2.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	65	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	65	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	13	kJ/m²	ISO 179/1eA
Thermal properties			
ISO Data			
Melting temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	30	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	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	3.0	mm	IEC 60695-11-10
UL recognition	UL	-	-
Electrical properties			
ISO Data			
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	475	-	IEC 60112
Other properties			
ISO Data			
Water absorption	0.25	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1570	kg/m³	ISO 1183
Rheological calculation properties			
ISO Data			
Density of melt	1260	kg/m³	-
Thermal conductivity of melt	0.197	W/(m K)	-
Spec. heat capacity of melt	1740	J/(kg K)	-
Eff. thermal diffusivity	9.01E-8	m²/s	-

Diagrams

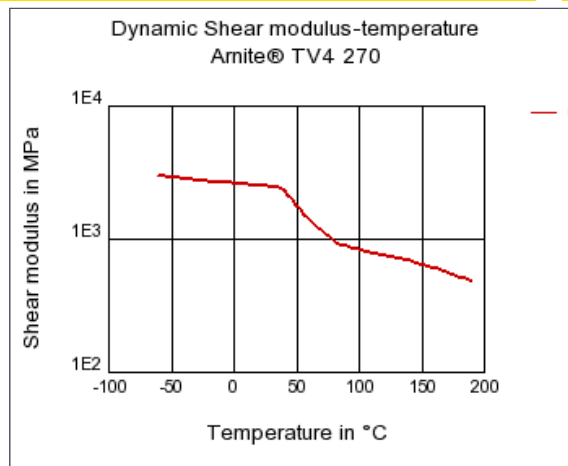
Viscosity-shear rate



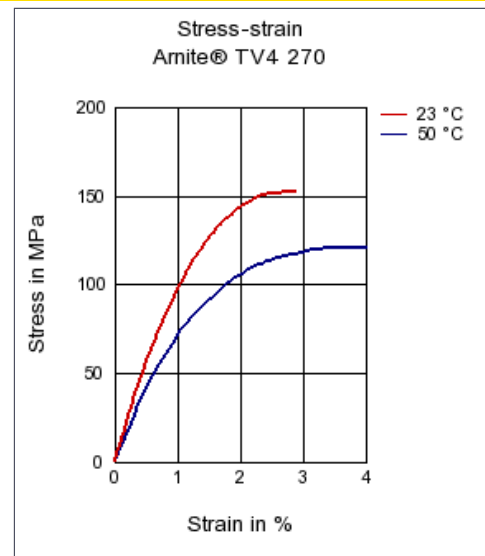
Shearstress-shear rate



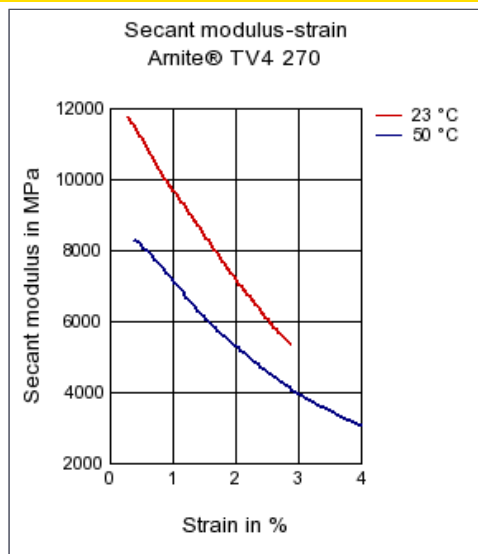
Dynamic Shear modulus-temperature



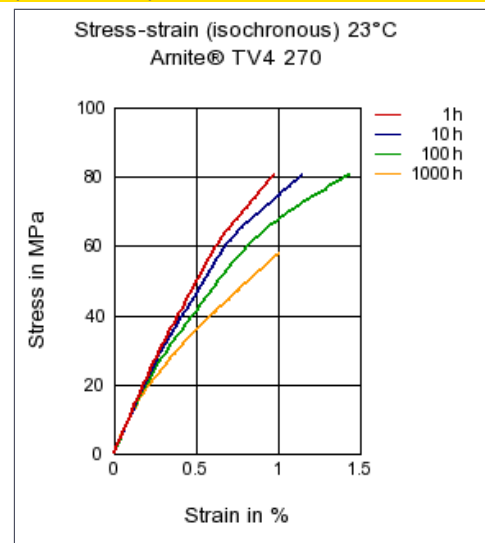
Stress-strain



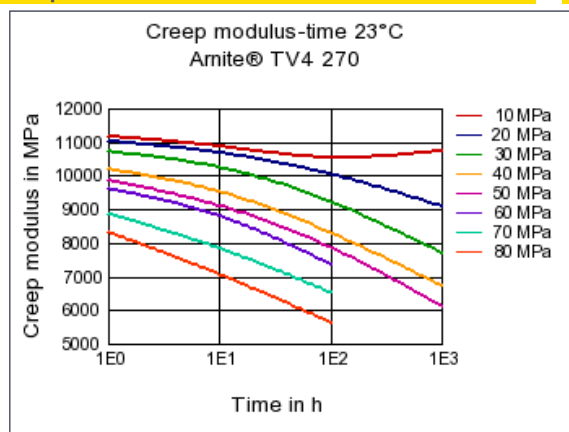
Secant modulus-strain



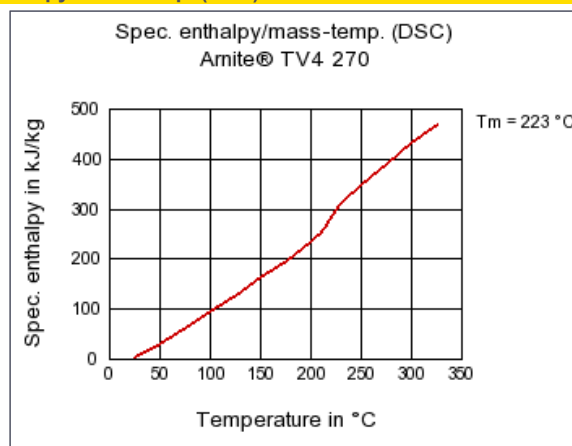
Stress-strain (isochronous) 23°C



Creep modulus-time 23°C



Spec. enthalpy/mass-temp. (DSC)



Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Other text information

Injection Molding

[Injection Molding Recommendations](#)