Arnite® AV2 360 S

PET-GF33 FR(17) DSM Engineering Plastics

Product Texts

33% Glass Reinforced, Flame Retardant

ISO 1043 PET-GF33 FR(17)

Arnite website

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	13000	MPa	ISO 527-1/-2
Stress at break	160	MPa	ISO 527-1/-2
Strain at break	2	%	ISO 527-1/-2
Charpy impact strength (+23°C)	35	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	35	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	8	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature (10°C/min)	255	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	235	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	250	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	20	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	65	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	IEC 60695-11-10
UL recognition	UL	-	-
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.7	mm	IEC 60695-11-10
UL recognition	UL	-	-
Oxygen index	36	%	ISO 4589-1/-2

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.7	-	IEC 60250
Relative permittivity, 1MHz	3.4	-	IEC 60250
Dissipation factor, 100Hz	10	E-4	IEC 60250
Dissipation factor, 1MHz	120	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	29	kV/mm	IEC 60243-1
Comparative tracking index	225	-	IEC 60112

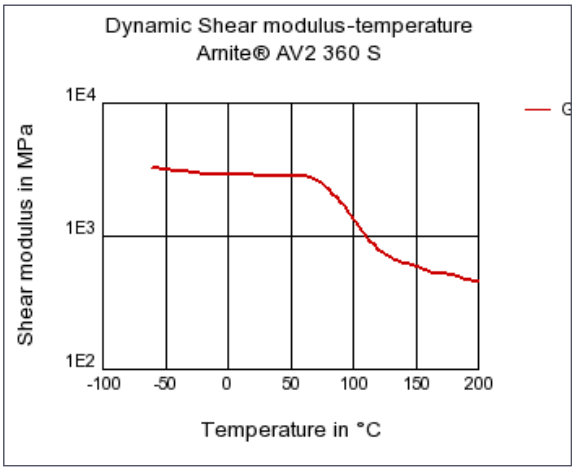
Other properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.12	%	Sim. to ISO 62
Density	1730	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1350	kg/m³	-
Thermal conductivity of melt	0.195	W/(m K)	-
Spec. heat capacity of melt	1670	J/(kg K)	-

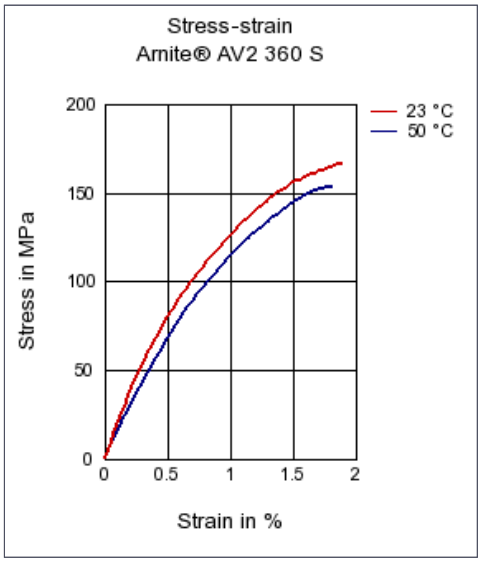
Eff. thermal diffusivity	8.67E-8	m²/s	-

Diagrams

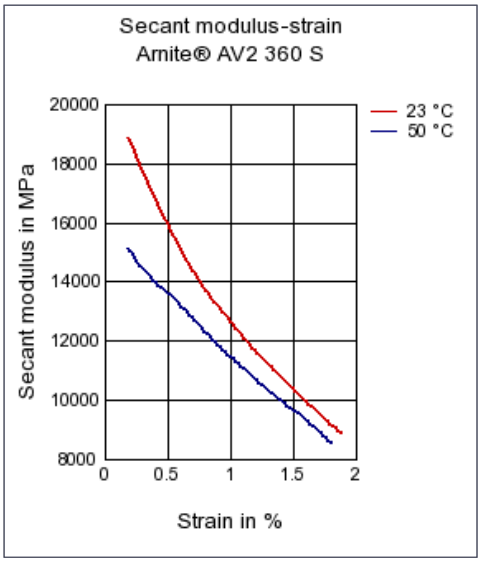
Dynamic Shear modulus-temperature



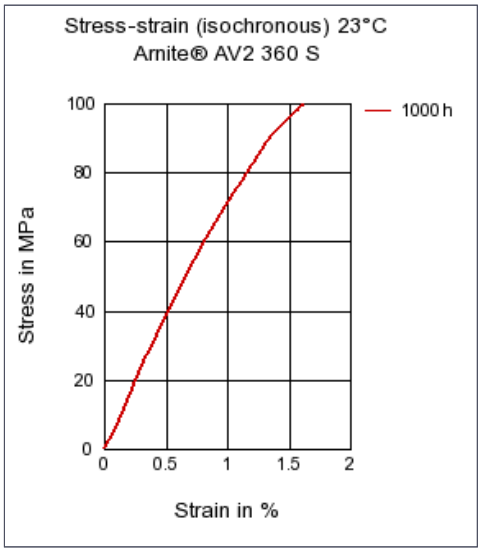
Stress-strain



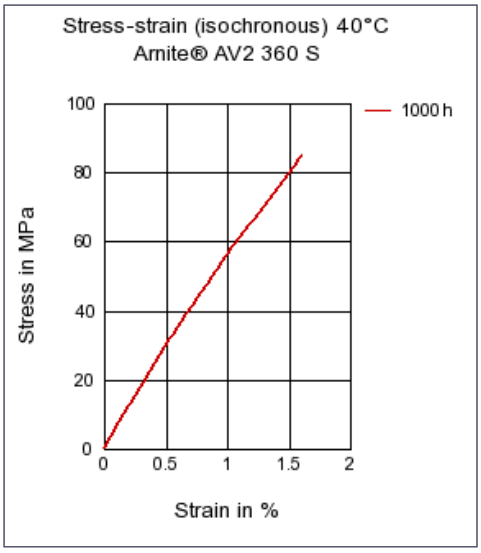
Secant modulus-strain



Stress-strain (isochronous) 23°C



Stress-strain (isochronous) 40°C



Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

Special Characteristics
Flame retardant

Other text information

Injection Molding
Injection Molding Recommendations