Arnite® TV4 260 S

PBT-GF30 FR(17) DSM Engineering Plastics

Product Texts

30% Glass Reinforced, Flame Retardant

ISO 1043 PBT-GF30 FR(17)

Arnite website

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11500	MPa	ISO 527-1/-2
Stress at break	130	MPa	ISO 527-1/-2
Strain at break	2	%	ISO 527-1/-2
Charpy impact strength (+23°C)	55	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	55	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	10	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
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	35	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.	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	0.5	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	4.1	-	IEC 60250
Relative permittivity, 1MHz	3.9	-	IEC 60250
Dissipation factor, 100Hz	20	E-4	IEC 60250
Dissipation factor, 1MHz	150	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	250	-	IEC 60112

Other properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1690	kg/m³	ISO 1183

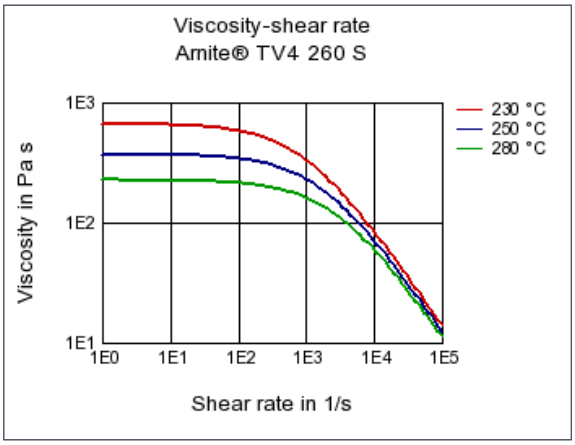
Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1440	kg/m³	-
Thermal conductivity of melt	0.153	W/(m K)	-
Spec. heat capacity of melt	1740	J/(kg K)	-

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.

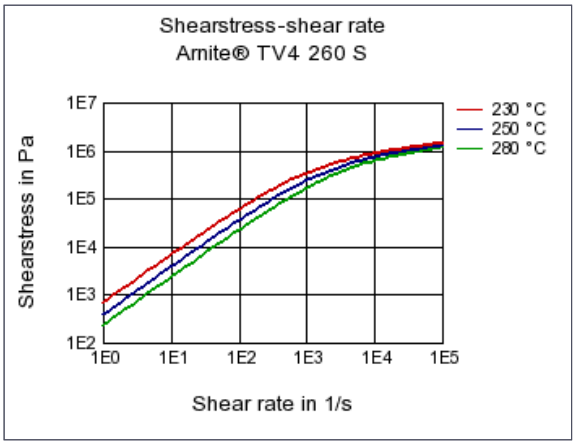
Eff. thermal diffusivity	6.12E-8	m²/s	-

Diagrams

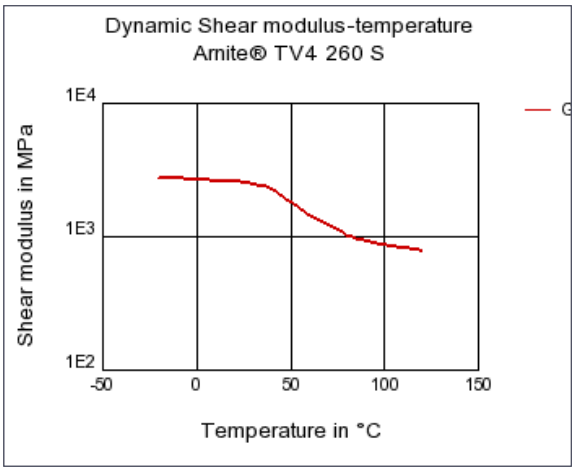
Viscosity-shear rate



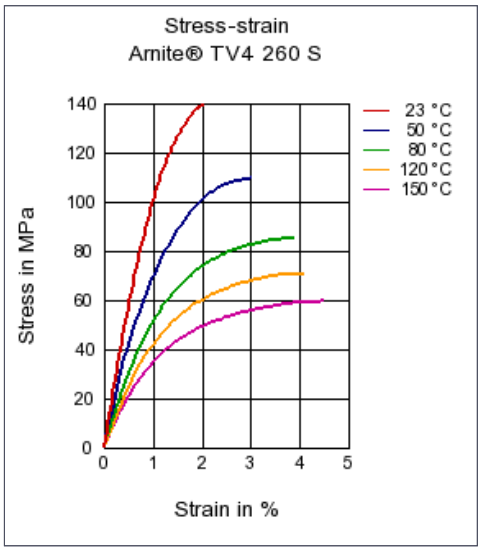
Shearstress-shear rate



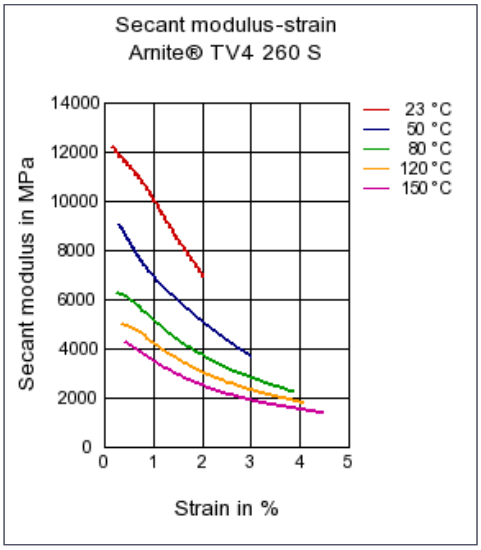
Dynamic Shear modulus-temperature



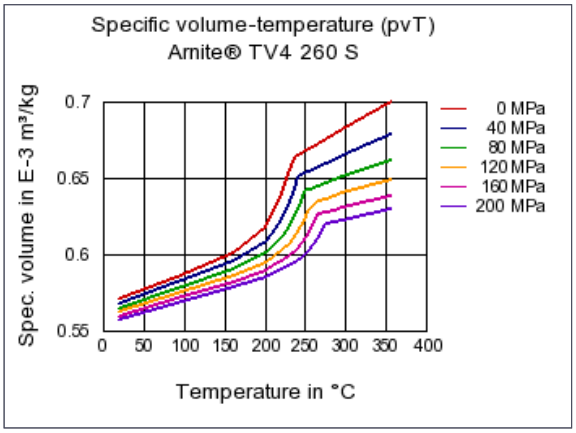
Stress-strain



Secant modulus-strain



Specific volume-temperature (pvT)



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.

Arnite® TV4 260 S

PBT-GF30 FR(17) DSM Engineering Plastics

Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

Special Characteristics
Flame retardant

Other text information

Injection Molding
Injection Molding Recommendations

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.