Arnite® TV4 460 KL

(PBT+PET)-GF30 DSM Engineering Plastics

Product Texts

30% Glass Reinforced, Heat Stabilized, UV Stabilized

ISO 1043 (PBT+PET)-GF30

Arnite website

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10500	MPa	ISO 527-1/-2
Stress at break	145	MPa	ISO 527-1/-2
Strain at break	2	%	ISO 527-1/-2
Charpy impact strength (+23°C)	50	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	50	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	11	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	11	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	205	°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	20	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	1.6	mm	IEC 60695-11-10

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	180	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	26	kV/mm	IEC 60243-1
Comparative tracking index	250	-	IEC 60112

Other properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.35	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1550	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1360	kg/m³	-
Thermal conductivity of melt	0.261	W/(m K)	-
Spec. heat capacity of melt	1850	J/(kg K)	-
Eff. thermal diffusivity	1.04E-7	m²/s	-

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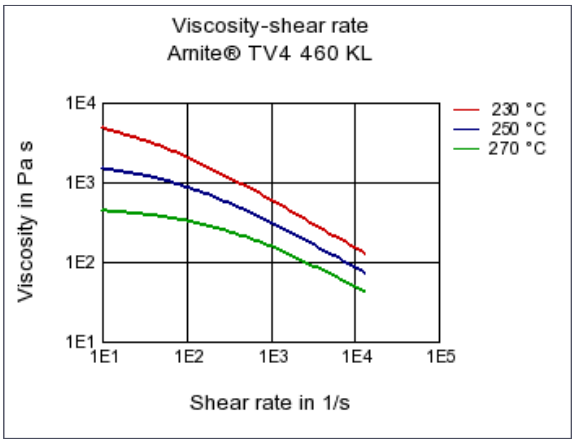
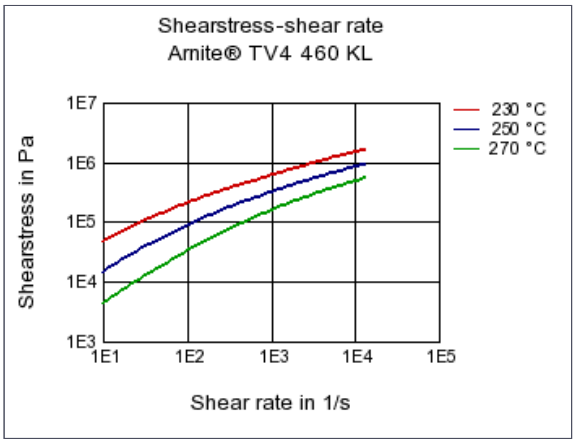
Diagrams

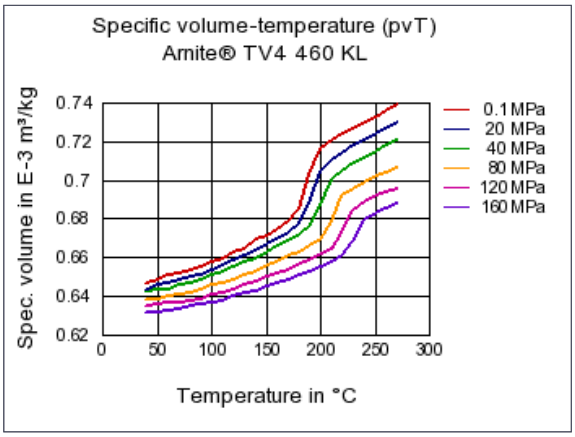
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Other text information

Injection Molding

Injection Molding Recommendations