Arnite® TV4 241 SN

PBT-GF20 FR(17) DSM Engineering Plastics

Product Texts

20% Glass Reinforced, Flame Retardant

ISO 1043 PBT-GF20 FR(17)

Arnite website

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	19	cm³/10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	8500	MPa	ISO 527-1/-2
Stress at break	110	MPa	ISO 527-1/-2
Strain at break	2.3	%	ISO 527-1/-2
Charpy impact strength (+23°C)	50	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°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	40	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	80	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	0.8	mm	IEC 60695-11-10
UL recognition	UL	-	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.2	-	IEC 60250
Relative permittivity, 1MHz	3.2	-	IEC 60250
Dissipation factor, 100Hz	10	E-4	IEC 60250
Dissipation factor, 1MHz	140	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Comparative tracking index	225	-	IEC 60112

Other properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1590	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1360	kg/m³	-
Thermal conductivity of melt	0.136	W/(m K)	-

Spec. heat capacity of melt	1870	J/(kg K)	-
Eff. thermal diffusivity	5.34E-8	m²/s	-

Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

Special Characteristics
Flame retardant

Other text information

Injection Molding
Injection Molding Recommendations