

Arnite® TV4 240 S

PBT-GF20 FR(17)

20% Glass Reinforced, Flame Retardant

Properties	Typical Data	Unit	Test Method
Rheological properties			
	Value		
Molding shrinkage [normal]	1.7	%	Sim. to ISO 294-4
Molding shrinkage [parallel]	0.6	%	Sim. to ISO 294-4
Mechanical properties			
	Value		
Tensile modulus	8500	MPa	ISO 527-1/-2
Stress at break	110	MPa	ISO 527-1/-2
Strain at break	2.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	50	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	50	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	9	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	9	kJ/m ²	ISO 179/1eA
Thermal properties			
	Value		
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)	0.4	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.8	E-4/°C	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
Burning Behav. at 3.0 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10



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Properties	Typical Data	Unit	Test Method
Electrical properties			
	Value		
Relative permittivity (100Hz)	3.9	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.7	-	IEC 62631-2-1
Dissipation factor (100 Hz)	20	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	150	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	27	kV/mm	IEC 60243-1
Comparative tracking index	250	V	IEC 60112
Other properties			
	Value		
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1610	kg/m ³	ISO 1183

