

Arnite[®] TV4 240

PBT–GF20

20% Glass Reinforced

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	VALUE		
Melt volume–flow rate	19	cm ³ /10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [normal]	1.3	%	Sim. to ISO 294–4
Molding shrinkage [parallel]	0.45	%	Sim. to ISO 294–4
MECHANICAL PROPERTIES	VALUE		
Tensile modulus	7200	MPa	ISO 527–1/–2
Stress at break	120	MPa	ISO 527–1/–2
Strain at break	3	%	ISO 527–1/–2
Flexural modulus	6900	MPa	ISO 178
Flexural strength	190	MPa	ISO 178
Charpy impact strength (+23°C)	40	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	7	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	7	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)	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)	0.4	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.8	E–4/°C	ISO 11359–1/–2

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Burning Behav. at 0.75 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Oxygen index	20	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	725	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.8	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	700	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.6	mm	IEC 60695-2-12

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	3.7	—	IEC 62631-2-1
Relative permittivity (1 MHz)	3.5	—	IEC 62631-2-1
Dissipation factor (100 Hz)	20	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	180	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	400	V	IEC 60112
Comparative tracking index (PLC)	1	class	UL 746A

OTHER PROPERTIES	VALUE		
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1450	kg/m³	ISO 1183

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Viscosity–shear rate

