Property Data

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Arnite® TV4 241 SN

PBT–GF20 FR(17)

20% Glass Fiber Reinforced, Flame Retardant

Print Date: 2025–10–04

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	**VALUE**		
Melt volume–flow rate	19	cm³/10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
MECHANICAL PROPERTIES	**VALUE**		
Tensile modulus	8200	MPa	ISO 527–1/–2
Stress at break	110	MPa	ISO 527–1/–2
Strain at break	2.5	%	ISO 527–1/–2
Flexural modulus	7700	MPa	ISO 178
Flexural strength	165	MPa	ISO 178
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)	7	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	6	kJ/m²	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 0.75 mm nom. thickn.	V–2	class	IEC 60695–11–10
Thickness tested	0.75	mm	IEC 60695–11–10

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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

ELECTRICAL PROPERTIES	VALUE		
Relative permittivity (100Hz)	3.2	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.2	-	IEC 62631-2-1
Dissipation factor (100 Hz)	10	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	140	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Comparative tracking index	225	V	IEC 60112
Comparative tracking index (PLC)	3	class	UL 746A

OTHER PROPERTIES	VALUE		
Water absorption	0.4	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1590	kg/m³	ISO 1183