Property Data

Envalior
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Arnite® TV4 230

PBT–GF15

15% Glass Reinforced

Print Date: 2024–11–21

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	**VALUE**		
Melt volume–flow rate	24	cm³/10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [normal]	1.4	%	Sim. to ISO 294–4
Molding shrinkage [parallel]	0.6	%	Sim. to ISO 294–4
MECHANICAL PROPERTIES	**VALUE**		
Tensile modulus	6000	MPa	ISO 527–1/–2
Stress at break	105	MPa	ISO 527–1/–2
Strain at break	3	%	ISO 527–1/–2
Flexural modulus	5600	MPa	ISO 178
Flexural strength	170	MPa	ISO 178
Charpy impact strength (+23°C)	30	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	30	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6	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)	195	°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)	0.5	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.8	E–4/°C	ISO 11359–1/–2

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
ELECTRICAL PROPERTIES	**VALUE**		
Relative permittivity (100Hz)	3.6	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.4	–	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
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	1410	kg/m³	ISO 1183

Viscosity–shear rate