

Arnite® Care T1U

PBT

Unreinforced, Medium Viscosity, Injection Molding, Medical grade

Properties	Typical Data	Unit	Test Method
Rheological properties			
	Value		
Melt volume-flow rate	24	cm ³ /10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [normal]	2	%	Sim. to ISO 294-4
Molding shrinkage [parallel]	2	%	Sim. to ISO 294-4
Mechanical properties			
	Value		
Tensile modulus	2700	MPa	ISO 527-1/-2
Yield stress	55	MPa	ISO 527-1/-2
Yield strain	3.5	%	ISO 527-1/-2
Nominal strain at break	20	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	5	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)	55	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	165	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.9	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.9	E-4/°C	ISO 11359-1/-2



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Properties	Typical Data	Unit	Test Method
Electrical properties		Value	
Relative permittivity (100Hz)	3.5	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.2	-	IEC 62631-2-1
Dissipation factor (100 Hz)	20	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	200	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	600	V	IEC 60112
Other properties		Value	
Water absorption	0.45	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1320	kg/m ³	ISO 1183

Viscosity-shear rate

