

DSM Engineering Plastics - Property Data

Arnite® TV4 240

PBT-GF20

20% Glass Reinforced

Properties	Typical Data	Unit	Test Method
MECHANICAL PROPERTIES			
Tensile modulus	7500	MPa	ISO 527-1/-2
Stress at break	120	MPa	ISO 527-1/-2
Strain at break	3	%	ISO 527-1/-2
Charpy impact strength (+23°C)	45	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	45	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			
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)	0.5	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 1.6 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Oxygen index	20	%	ISO 4589-1/-2
ELECTRICAL PROPERTIES			
Relative permittivity (100Hz)	3.7	-	IEC 60250
Relative permittivity (1 MHz)	3.5	-	IEC 60250
Dissipation factor (100 Hz)	20	E-4	IEC 60250
Dissipation factor (1 MHz)	180	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Surface resistivity	>1E15	Ohm	IEC 60093
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	400	-	IEC 60112
OTHER PROPERTIES			
Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1450	kg/m ³	ISO 1183

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