

Arnitel[®] EL630

TPC-ET

Injection Molding

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Properties	Typical Data	Unit	Test Method
Rheological properties			
Melt volume-flow rate	28	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [parallel]	1.75	%	Sim. to ISO 294-4
Molding shrinkage [normal]	2	%	Sim. to ISO 294-4
Mechanical properties			
Shore D Hardness (3s)	58	-	ISO 868
Tensile modulus	280	MPa	ISO 527-1/-2
Stress at break	36	MPa	ISO 527-1/-2
Nominal strain at break	500	%	ISO 527-1/-2
Stress at 5% strain	11.9	MPa	ISO 527-1/-2
Stress at 10% strain	16.9	MPa	ISO 527-1/-2
Stress at 50% strain	18.6	MPa	ISO 527-1/-2
Stress at 100% strain	18	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m ²	ISO 180/1A
Thermal properties			
Melting temperature (10°C/min)	212	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	115	°C	ISO 75-1/-2

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Properties	Typical Data	Unit	Test Method
Vicat softening temperature (50° C/h 50N)	125	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.85	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.85	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	IEC 60695-11-10
UL recognition	Yes	-	-

Electrical properties

Relative permittivity (100Hz)	3.8	-	IEC 60250
Relative permittivity (1 MHz)	3.4	-	IEC 60250
Dissipation factor (100 Hz)	110	E-4	IEC 60250
Dissipation factor (1 MHz)	340	E-4	IEC 60250
Volume resistivity	1E12	Ohm*m	IEC 60093
Electric strength	22	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other properties

Density	1240	kg/m ³	ISO 1183
Apparent density	770	kg/m ³	ISO 60
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62

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