Arnitel®

Arnitel® EL550

TPC-ET

Injection Molding

Print Date: 2017-11-03

Properties	Typical Data	Unit	Test Method
Rheological properties	Value		
Melt volume-flow rate	36	cm³/10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [parallel]	1.55	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.55	%	Sim. to ISO 294-4
Mechanical properties	Value		
Shore D Hardness (3s)	51	-	ISO 868
Tensile modulus	170	MPa	ISO 527-1/-2
Stress at break	32	MPa	ISO 527-1/-2
Nominal strain at break	640	%	ISO 527-1/-2
Stress at 5% strain	7.4	MPa	ISO 527-1/-2
Stress at 10% strain	11.1	MPa	ISO 527-1/-2
Stress at 50% strain	13.8	MPa	ISO 527-1/-2
Stress at 100% strain	13.7	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	25	kJ/m²	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m²	ISO 180/1A
Izod notched impact strength (-20°C)	N	kJ/m²	ISO 180/1A
Thermal properties	Value		
Melting temperature (10°C/min)	207	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	110	°C	ISO 75-1/-2

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Vicat softening temperature (50°C/h 50N)	90	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	2	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	2	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	Value		
Relative permittivity (100Hz)	4.4	-	IEC 60250
Relative permittivity (1 MHz)	4	-	IEC 60250
Dissipation factor (1 MHz)	400	E-4	IEC 60250
Volume resistivity	1E11	Ohm*m	IEC 60093
Electric strength	21	kV/mm	IEC 60243-1
Comparative tracking index	600	V	IEC 60112

Other properties	Value		
Density	1200	kg/m³	ISO 1183
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62