

Arnitel[®] EL740

TPC-ET

Injection Molding

Print Date: 2016-04-01

Properties	Typical Data	Unit	Test Method
Rheological properties			
Melt volume-flow rate	18	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)	70	-	ISO 868
Tensile modulus	800	MPa	ISO 527-1/-2
Stress at break	43	MPa	ISO 527-1/-2
Nominal strain at break	360	%	ISO 527-1/-2
Stress at 5% strain	30	MPa	ISO 527-1/-2
Stress at 10% strain	34	MPa	ISO 527-1/-2
Stress at 50% strain	25	MPa	ISO 527-1/-2
Stress at 100% strain	26	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	6	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	9	kJ/m ²	ISO 180/1A
Thermal properties			
Melting temperature (10°C/min)	221	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	120	°C	ISO 75-1/-2

All information supplied by or on behalf of DSM in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but DSM assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the aforementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.

Properties	Typical Data	Unit	Test Method
Vicat softening temperature (50° C/h 50N)	160	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.65	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.65	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)	3.7	-	IEC 60250
Relative permittivity (1 MHz)	3.3	-	IEC 60250
Dissipation factor (1 MHz)	300	E-4	IEC 60250
Volume resistivity	1E13	Ohm*m	IEC 60093
Electric strength	23	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

Other properties

Density	1290	kg/m ³	ISO 1183
Apparent density	830	kg/m ³	ISO 60
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62

All information supplied by or on behalf of DSM in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but DSM assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the aforementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.