

Arnitel® EM460

TPC-ET

Injection Molding or Extrusion Grade

Print Date: 2018-05-01

Properties	Typical Data	Unit	Test Method
Rheological properties		Value	
Melt volume-flow rate	46	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [parallel]	1.25	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.5	%	Sim. to ISO 294-4
Mechanical properties		Value	
Shore D Hardness (3s)	40	-	ISO 868
Tensile modulus	85	MPa	ISO 527-1/-2
Stress at break	23	MPa	ISO 527-1/-2
Nominal strain at break	800	%	ISO 527-1/-2
Stress at 5% strain	3.9	MPa	ISO 527-1/-2
Stress at 10% strain	6.6	MPa	ISO 527-1/-2
Stress at 50% strain	9.2	MPa	ISO 527-1/-2
Stress at 100% strain	9.3	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	N	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m ²	ISO 180/1A
Izod notched impact strength (-20°C)	N	kJ/m ²	ISO 180/1A
Thermal properties		Value	
Melting temperature (10°C/min)	189	°C	ISO 11357-1/-3
Vicat softening temperature (50°C/h 50N)	50	°C	ISO 306

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Property Data

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Properties	Typical Data	Unit	Test Method
Coeff. of linear therm. expansion (parallel)	1.6	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.6	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 (1 MHz)	4.4	-	IEC 60250
Dissipation factor (1 MHz)	350	E-4	IEC 60250
Volume resistivity	1E11	Ohm*m	IEC 60093
Electric strength	20	kV/mm	IEC 60243-1
Comparative tracking index	600	V	IEC 60112

Other properties

Value

Density	1150	kg/m ³	ISO 1183
Water absorption	0.7	%	Sim. to ISO 62
Humidity absorption	0.3	%	Sim. to ISO 62

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