

Arnitel® EM631

TPC-ET

Extrusion Grade

Properties	Typical Data	Unit	Test Method
Rheological properties			
	Value		
Melt volume-flow rate	6.5	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Mechanical properties			
	Value		
Shore D Hardness (3s)	61	-	ISO 868
Tensile modulus	310	MPa	ISO 527-1/-2
Yield stress	20	MPa	ISO 527-1/-2
Yield strain	29	%	ISO 527-1/-2
Stress at break	35	MPa	ISO 527-1/-2
Stress at 10% strain	15.9	MPa	ISO 527-1/-2
Stress at 100% strain	15.8	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
Tear strength	160	kN/m	ISO 34-1; Method B
Thermal properties			
	Value		
Melting temperature (10°C/min)	212	°C	ISO 11357-1/-3
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

Electrical properties

Value



Property Data

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Properties	Typical Data	Unit	Test Method
Relative permittivity (100Hz)	3.8	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.4	-	IEC 62631-2-1
Dissipation factor (100 Hz)	110	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	340	E-4	IEC 62631-2-1
Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
Electric strength	22	kV/mm	IEC 60243-1
Comparative tracking index	600	V	IEC 60112

Other properties

Value

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

