

Arnitel® PM381

TPC-ET

Film Extrusion, Food Contact Quality

Properties	Typical Data	Unit	Test Method
Rheological properties			
	Value		
Melt volume-flow rate	4.7	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Mechanical properties			
	Value		
Shore D Hardness (3s)	32	-	ISO 868
Tensile modulus	42	MPa	ISO 527-1/-2
Stress at break	12.5	MPa	ISO 527-1/-2
Nominal strain at break	155	%	ISO 527-1/-2
Stress at 5% strain	2.2	MPa	ISO 527-1/-2
Stress at 10% strain	4	MPa	ISO 527-1/-2
Stress at 50% strain	8.3	MPa	ISO 527-1/-2
Stress at 100% strain	10.9	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 (-30°C)	N	kJ/m ²	ISO 180/1A
Tear strength	52	kN/m	ISO 34-1; Method B
Thermal properties			
	Value		
Melting temperature (10°C/min)	212	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	44	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	120	°C	ISO 306



Property Data

Arnitel[®] PM381

Properties	Typical Data	Unit	Test Method
Vicat softening temperature (50°C/h 10N)	127	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.5	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.5	E-4/°C	ISO 11359-1/-2

Electrical properties

Value

Relative permittivity (100Hz)	4.7	-	IEC 62631-2-1
Relative permittivity (1 MHz)	4.4	-	IEC 62631-2-1
Dissipation factor (100 Hz)	310	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	810	E-4	IEC 62631-2-1
Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
Electric strength	20	kV/mm	IEC 60243-1
Comparative tracking index	600	V	IEC 60112

Other properties

Value

Density	1160	kg/m ³	ISO 1183
Water absorption	7	%	Sim. to ISO 62
Humidity absorption	0.4	%	Sim. to ISO 62

