

Arnitel[®] PM580

TPC—ET

Extrusion Grade

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES	VALUE		
Melt volume—flow rate	4	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
MECHANICAL PROPERTIES	VALUE		
Shore D Hardness (3s)	53	—	ISO 868
Tensile modulus	220	MPa	ISO 527-1/-2
Stress at break	24	MPa	ISO 527-1/-2
Nominal strain at break	170	%	ISO 527-1/-2
Stress at 5% strain	9.5	MPa	ISO 527-1/-2
Stress at 10% strain	14	MPa	ISO 527-1/-2
Stress at 50% strain	18	MPa	ISO 527-1/-2
Stress at 100% strain	20	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	16	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)	25	kJ/m ²	ISO 180/1A
Flexural modulus	240	MPa	ISO 178
MECHANICAL PROPERTIES (DIE CUTTING)	VALUE		
Stress at break (normal)	43	MPa	ISO 527-1/-2
Tear strength (normal)	141	kN/m	ISO 34-1; Method B



Arnitel[®] PM580

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Tear strength (parallel)	149	kN/m	ISO 34-1; Method B
Strain at break (normal)	710	%	ISO 527-1/-2
THERMAL PROPERTIES		VALUE	
Melting temperature (10°C/min)	218	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	100	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	80	°C	ISO 306
Vicat softening temperature (50°C/h 10N)	204	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.1	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.1	E-4/°C	ISO 11359-1/-2
OTHER PROPERTIES		VALUE	
Density	1240	kg/m³	ISO 1183
Water absorption	2.5	%	Sim. to ISO 62
Humidity absorption	0.4	%	Sim. to ISO 62

