



Arnitel® PM581 - Shore 53 D

TPC

DSM Engineering Plastics

Product Texts

Extrusion Grade

ISO 18064 TPC-ET

[Arnitel website](#)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	4	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Mechanical properties			
ISO Data			
Tensile Modulus	300	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
Stress at 10% elongation	13.1	MPa	ISO 527-1/-2
Stress at 100% elongation	17.9	MPa	ISO 527-1/-2
Stress at break TPE	24.5	MPa	ISO 527-1/-2
Thermal properties			
ISO Data			
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	105	°C	ISO 306
Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110	E-6/K	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
Electrical properties			
ISO Data			
Relative permittivity, 100Hz	4.7	-	IEC 60250
Relative permittivity, 1MHz	4.4	-	IEC 60250
Dissipation factor, 100Hz	310	E-4	IEC 60250
Dissipation factor, 1MHz	810	E-4	IEC 60250
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	21	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
Other properties			
ISO Data			
Water absorption	2.5	%	Sim. to ISO 62
Humidity absorption	0.4	%	Sim. to ISO 62
Density	1240	kg/m ³	ISO 1183

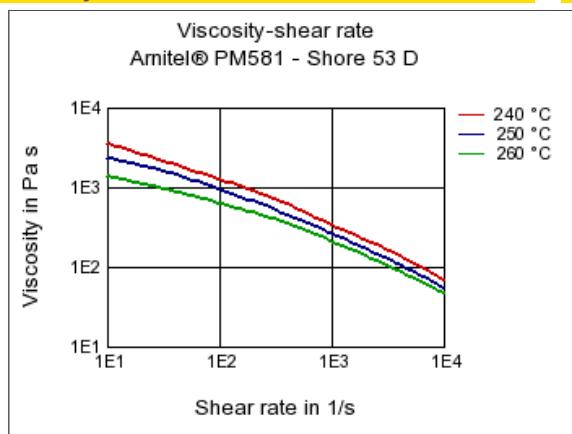
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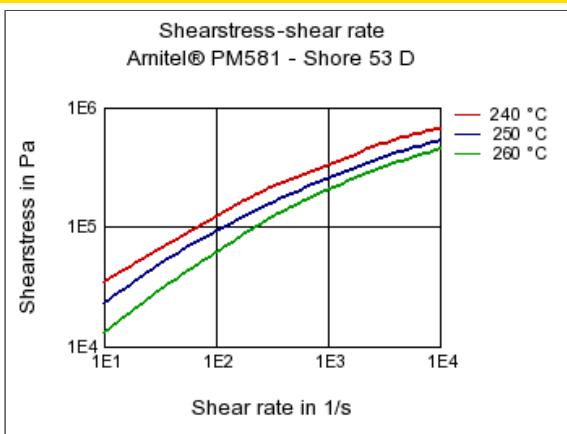
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Diagrams

Viscosity-shear rate



Shearstress-shear rate



Characteristics

Processing

Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Other text information

Other extrusion

[Arnitel E & P tube manufacturing guidelines](#)