

**Arnitel® EM550 - Shore 52 D**

TPC

DSM Engineering Plastics

**Product Texts**

Extrusion Grade

ISO 18064 TPC-ET

[Arnitel website](#)

<b>Rheological properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8.7	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	200	MPa	ISO 527-1/-2
Yield stress	14	MPa	ISO 527-1/-2
Yield strain	20	%	ISO 527-1/-2
Nominal strain at break	>50	%	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	25	kJ/m <sup>2</sup>	ISO 179/1eA
Stress at 10% elongation	12	MPa	ISO 527-1/-2
Strain at break TPE	>300	%	ISO 527-1/-2
Compression Set under constant strain, 23°C	24	%	ISO 815
Compression Set under constant strain, 70°C	40	%	ISO 815
Tear strength	150	kN/m	ISO 34-1
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature (10°C/min)	207	°C	ISO 11357-1/-3
Vicat softening temperature, 50°C/h 50N	90	°C	ISO 306
Coeff. of linear therm. expansion, parallel	150	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	150	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
UL recognition	UL	-	-
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 100Hz	4.4	-	IEC 60250
Relative permittivity, 1MHz	4	-	IEC 60250
Dissipation factor, 1MHz	400	E-4	IEC 60250
Volume resistivity	1E11	Ohm*m	IEC 60093
Electric strength	21	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
<b>Other properties</b>			
<b>ISO Data</b>			
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1200	kg/m <sup>3</sup>	ISO 1183
<b>Test specimen production</b>			
<b>ISO Data</b>			

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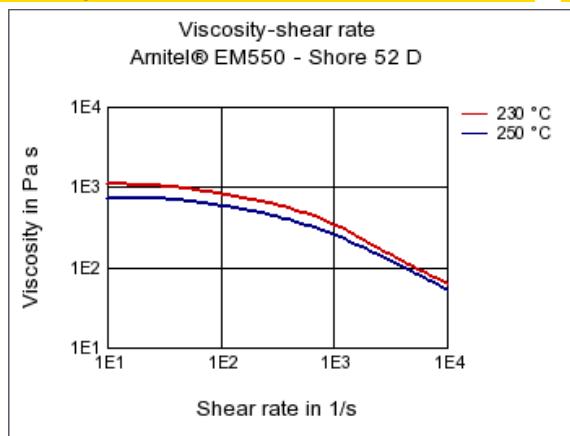
### TPC

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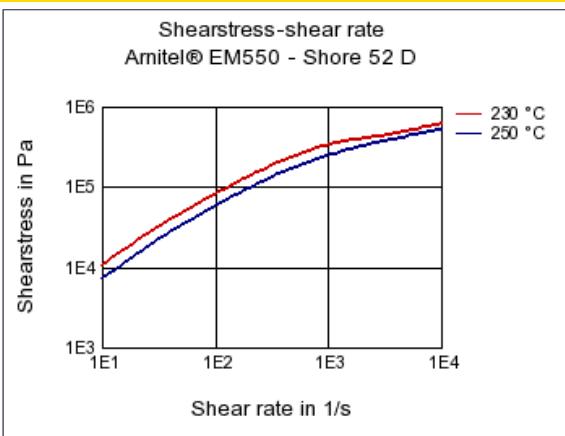
Injection Molding, melt temperature	235	°C	ISO 294
Injection Molding, mold temperature	35	°C	ISO 10724
Injection Molding, injection velocity	500	mm/s	ISO 294

### Diagrams

#### Viscosity-shear rate



#### Shearstress-shear rate



### Characteristics

#### Processing

Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion

#### Delivery form

Pellets