



Arnitel® EM550 - Shore 52 D			
TPC		DSM Engineering Plastics	
Product Texts			
Extrusion Grade			
ISO 18064 TPC-ET			
Rheological properties			
	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	8.7	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Mechanical properties			
	Value	Unit	Test Standard
ISO Data			
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 ²	ISO 179/1eA
Charpy notched impact strength, -30°C	25	kJ/m ²	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
Thermal properties			
	Value	Unit	Test Standard
ISO Data			
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	-	-
Electrical properties			
	Value	Unit	Test Standard
ISO Data			
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
Other properties			
	Value	Unit	Test Standard
ISO Data			
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1200	kg/m ³	ISO 1183
Test specimen production			
	Value	Unit	Test Standard
ISO Data			

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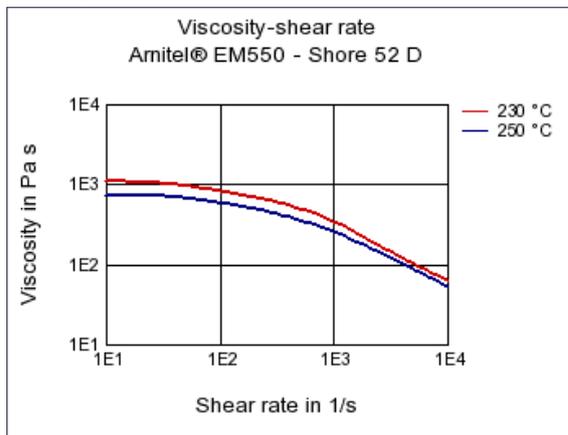
TPC

DSM Engineering Plastics

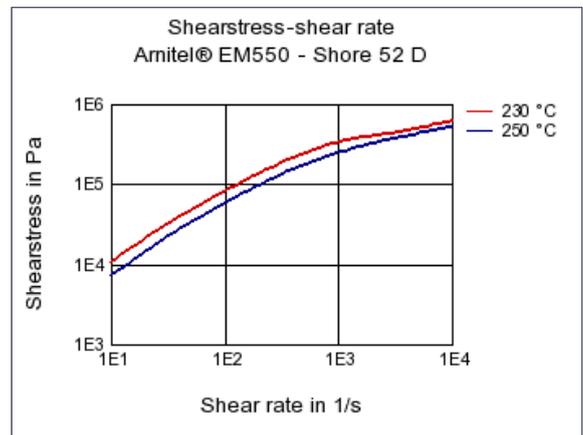
Injection Molding, melt temperature	235	°C	ISO 294
Injection Molding, mold temperature	35	°C	ISO 10724
Injection Molding, injection velocity	500	mm/s	ISO 294

Diagrams

Viscosity-shear rate



Shearstress-shear rate



Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion

Delivery form

Pellets