

Arnitel® EM630-H - Shore 59 D

TPC

DSM Engineering Plastics

Product Texts

Extrusion Grade, Heat Stabilized

ISO 18064 TPC-ET

[Arnitel website](#)

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	3.7	cm ³ /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Mechanical properties			
ISO Data			
Tensile Modulus	310	MPa	ISO 527-1/-2
Yield stress	20	MPa	ISO 527-1/-2
Yield strain	29	%	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	12	kJ/m ²	ISO 179/1eA
Stress at 10% elongation	16	MPa	ISO 527-1/-2
Stress at 100% elongation	16	MPa	ISO 527-1/-2
Stress at 300% elongation	20	MPa	ISO 527-1/-2
Strain at break TPE	>300	%	ISO 527-1/-2
Stress at break TPE	35	MPa	ISO 527-1/-2
Tear strength	175	kN/m	ISO 34-1
Thermal properties			
ISO Data			
Melting temperature (10°C/min)	212	°C	ISO 11357-1/-3
Vicat softening temperature, 50°C/h 50N	125	°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
Electrical properties			
ISO Data			
Relative permittivity, 1MHz	4.1	-	IEC 60250
Dissipation factor, 1MHz	170	E-4	IEC 60250
Volume resistivity	1.2E11	Ohm*m	IEC 60093
Electric strength	22	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
Other properties			
ISO Data			
Water absorption	0.63	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1240	kg/m ³	ISO 1183
Test specimen production			
ISO Data			
Injection Molding, melt temperature	240	°C	ISO 294

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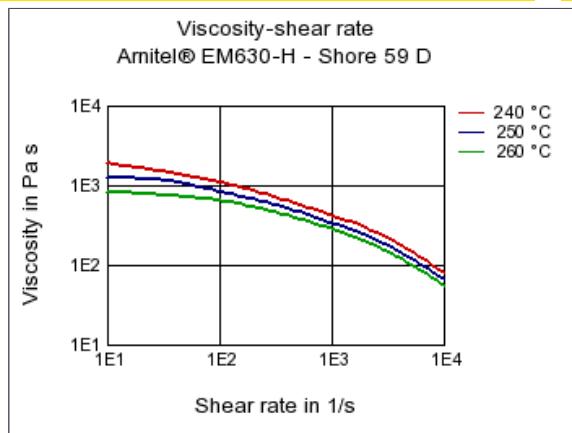
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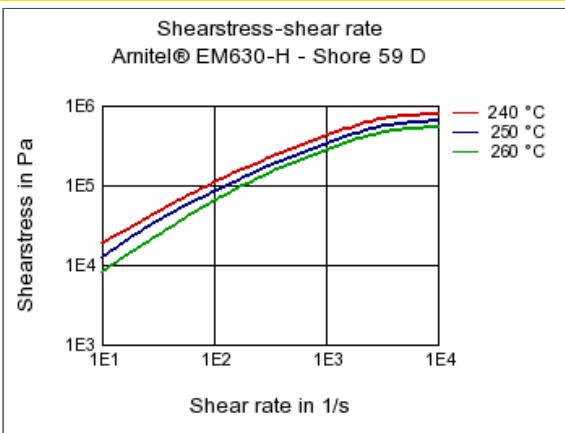
Injection Molding, mold temperature	35	°C	ISO 10724
Injection Molding, injection velocity	500	mm/s	ISO 294

Diagrams

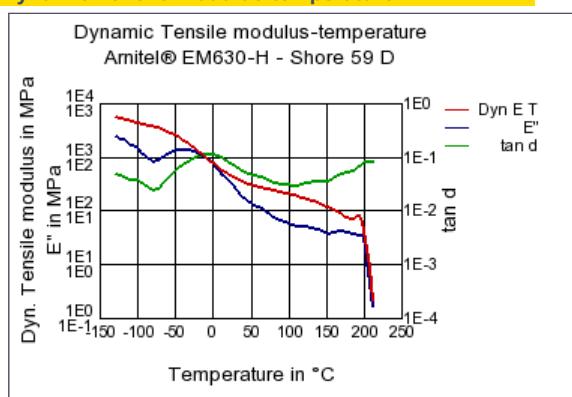
Viscosity-shear rate



Shearstress-shear rate



Dynamic Tensile modulus-temperature



Characteristics

Processing

Injection Molding, Other Extrusion

Additives

Release agent

Delivery form

Pellets

Other text information

Other extrusion

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