

**Arnitel® EL630 - Shore 58 D**

TPC

DSM Engineering Plastics

**Product Texts**

Injection Molding

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	28	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	280	MPa	ISO 527-1/-2
Yield stress	26	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	12	kJ/m <sup>2</sup>	ISO 179/1eA
Tensile notched impact strength, +23°C	233	kJ/m <sup>2</sup>	ISO 8256/1
Stress at 10% elongation	16.9	MPa	ISO 527-1/-2
Stress at 100% elongation	18	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	36	MPa	ISO 527-1/-2
Compression Set under constant strain, 23°C	20	%	ISO 815
Compression Set under constant strain, 70°C	43	%	ISO 815
Tear strength	152	kN/m	ISO 34-1
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature (10°C/min)	212	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-60	°C	ISO 11357-1/-2
Temp. of deflection under load (0.45 MPa)	115	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	125	°C	ISO 306
Coeff. of linear therm. expansion, parallel	185	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	185	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	3.8	-	IEC 60250
Relative permittivity, 1MHz	3.4	-	IEC 60250
Dissipation factor, 100Hz	110	E-4	IEC 60250
Dissipation factor, 1MHz	340	E-4	IEC 60250
Volume resistivity	1E12	Ohm*m	IEC 60093
Electric strength	22	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112

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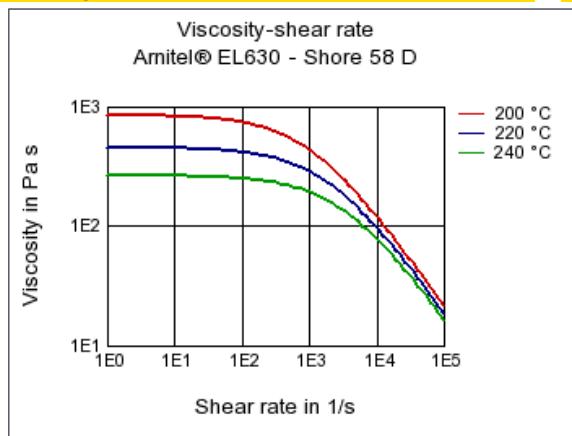
## Other properties

### ISO Data

Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1240	kg/m <sup>3</sup>	ISO 1183

## Diagrams

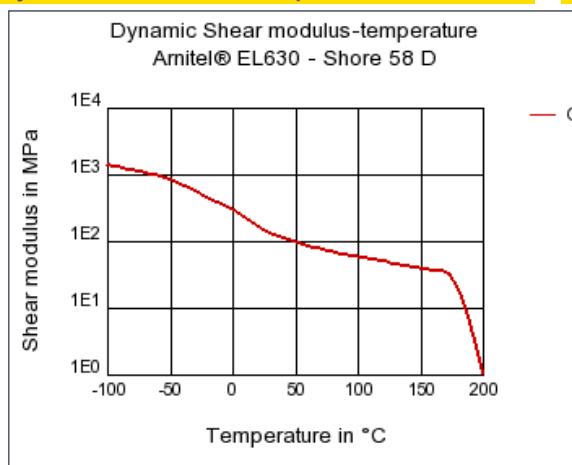
### Viscosity-shear rate



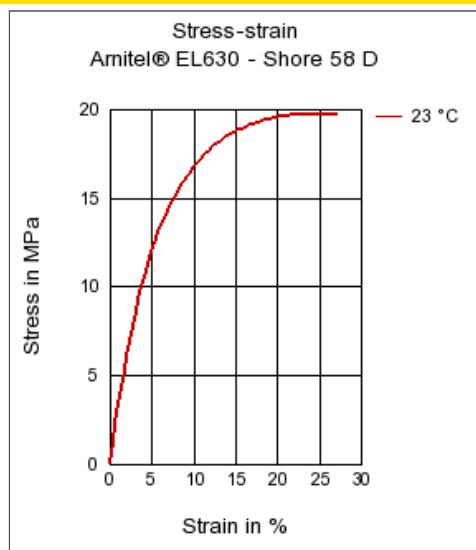
### Shearstress-shear rate



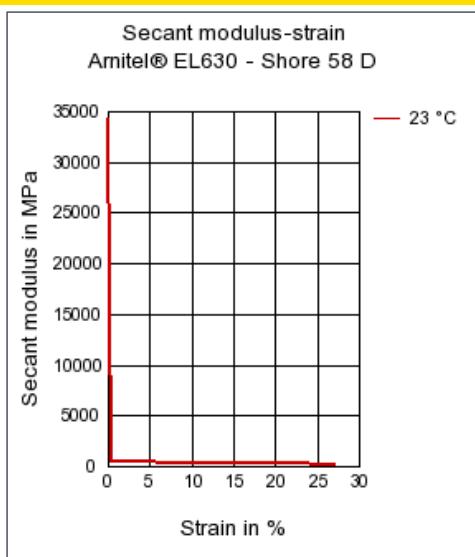
### Dynamic Shear modulus-temperature



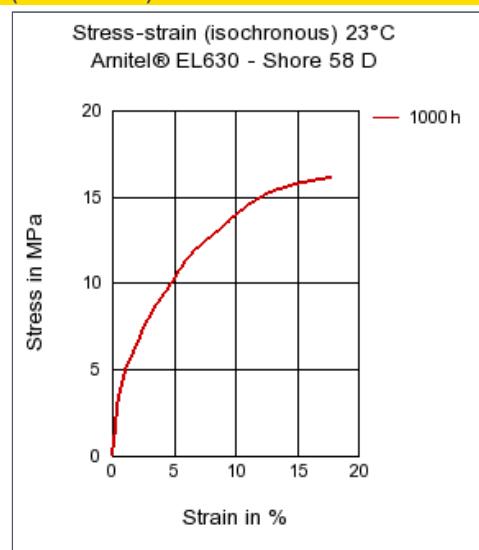
### Stress-strain



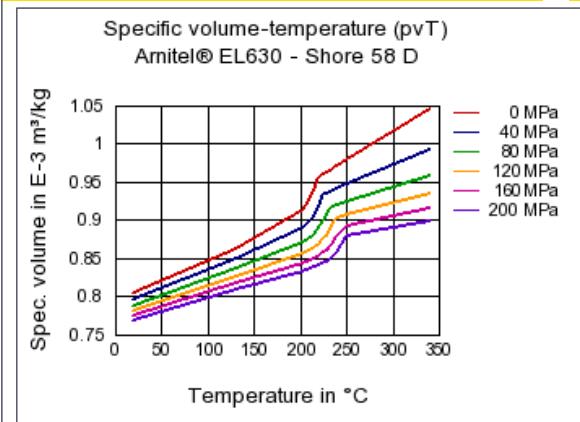
## Secant modulus-strain



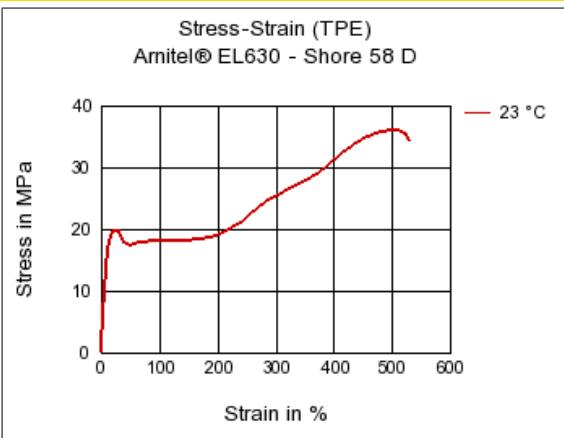
## Stress-strain (isochronous) 23°C



## Specific volume-temperature (pvT)



## Stress-Strain (TPE)



## Characteristics

## Processing

Injection Molding

## Delivery form

Pellets

## Other text information

## Injection Molding

[Injection Molding Recommendations](#)