



<b>Arnitel® EM400 - Shore 33 D</b>			
TPC		DSM Engineering Plastics	
<b>Product Texts</b>			
Injection Molding or Extrusion Grade			
ISO 18064 TPC-ET			
<b>Rheological properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	33	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
<b>Mechanical properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	40	MPa	ISO 527-1/-2
Yield stress	7	MPa	ISO 527-1/-2
Yield strain	77	%	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	N	kJ/m <sup>2</sup>	ISO 179/1eA
Tensile notched impact strength, +23°C	218	kJ/m <sup>2</sup>	ISO 8256/1
Stress at 10% elongation	3.5	MPa	ISO 527-1/-2
Stress at 100% elongation	7.3	MPa	ISO 527-1/-2
Stress at 300% elongation	11.5	MPa	ISO 527-1/-2
Strain at break TPE	>300	%	ISO 527-1/-2
Stress at break TPE	21	MPa	ISO 527-1/-2
Compression Set under constant strain, 23°C	14	%	ISO 815
Compression Set under constant strain, 70°C	47	%	ISO 815
Tear strength	95	kN/m	ISO 34-1
<b>Thermal properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melting temperature (10°C/min)	195	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	-78	°C	ISO 11357-1/-2
Coeff. of linear therm. expansion, parallel	220	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	220	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
<b>Electrical properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Relative permittivity, 100Hz	4.1	-	IEC 60250
Relative permittivity, 1MHz	4	-	IEC 60250
Dissipation factor, 100Hz	10	E-4	IEC 60250
Dissipation factor, 1MHz	170	E-4	IEC 60250
Volume resistivity	1E13	Ohm*m	IEC 60093
Electric strength	20	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
<b>Other properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Water absorption	0.75	%	Sim. to ISO 62

**Amitel® EM400 - Shore 33 D**

TPC

DSM Engineering Plastics

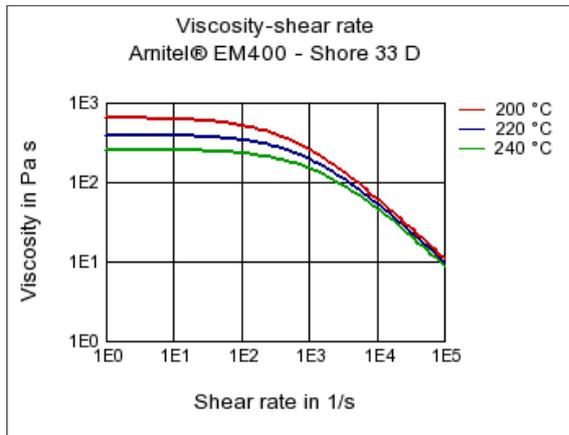
Humidity absorption	0.3	%	Sim. to ISO 62
Density	1110	kg/m <sup>3</sup>	ISO 1183

**Rheological calculation properties**

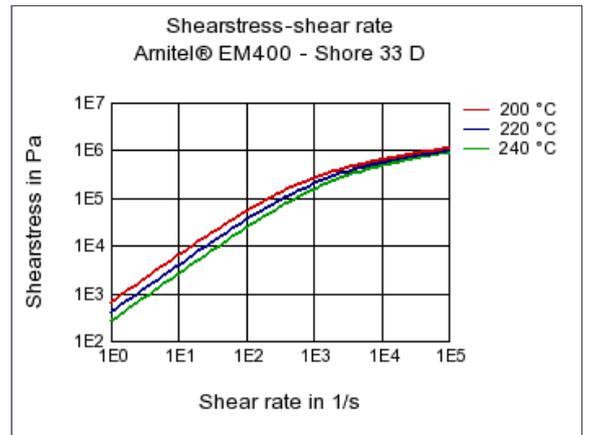
	Value	Unit	Test Standard
<b>ISO Data</b>			
Density of melt	896	kg/m <sup>3</sup>	-
Thermal conductivity of melt	0.1	W/(m K)	-
Spec. heat capacity of melt	1700	J/(kg K)	-
Eff. thermal diffusivity	6.56E-8	m <sup>2</sup> /s	-

**Diagrams**

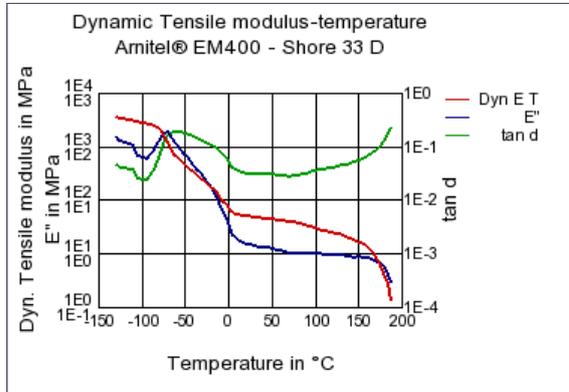
**Viscosity-shear rate**



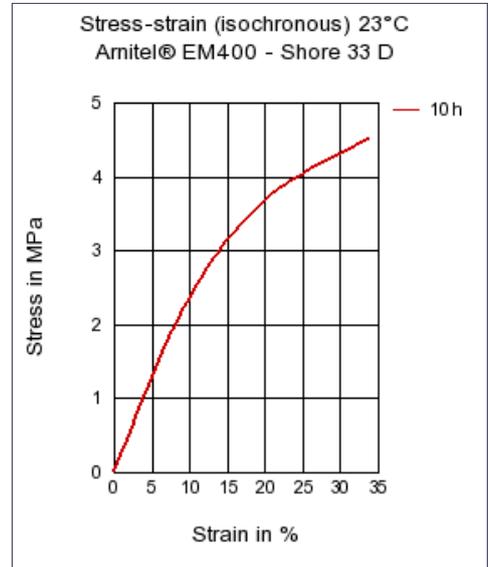
**Shearstress-shear rate**



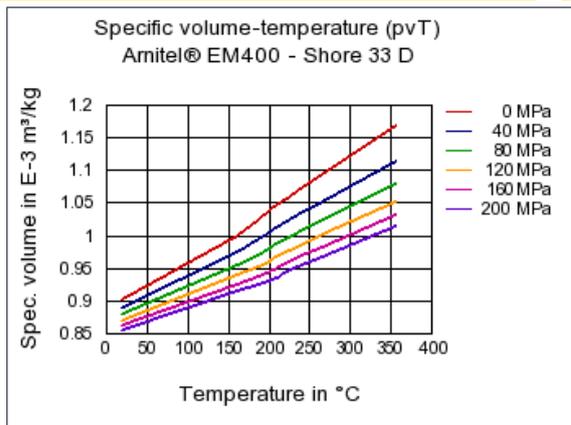
**Dynamic Tensile modulus-temperature**



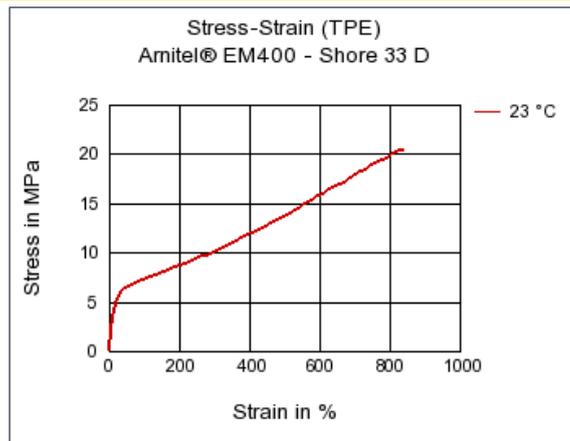
**Stress-strain (isochronous) 23°C**



Specific volume-temperature (pvT)



Stress-Strain (TPE)



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Other text information

Injection Molding

[Injection Molding Recommendations](#)