

# DSM Engineering Plastics - Property Data

## Arnite® AV2 390

PET-GF50

50% Glass Reinforced

Properties	Typical Data	Unit	Test Method
<b>MECHANICAL PROPERTIES</b>			
Tensile modulus	<b>19000</b>	MPa	ISO 527-1/-2
Stress at break	<b>210</b>	MPa	ISO 527-1/-2
Strain at break	<b>2</b>	%	ISO 527-1/-2
Charpy impact strength (+23°C)	<b>55</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	<b>55</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	<b>14</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	<b>14</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
Temp. of deflection under load (1.80 MPa)	<b>240</b>	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	<b>255</b>	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	<b>0.2</b>	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	<b>0.6</b>	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.6 mm nom. thickn.	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>1.47</b>	mm	IEC 60695-11-10
Burning Behav. at thickness h	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>0.81</b>	mm	IEC 60695-11-10
<b>ELECTRICAL PROPERTIES</b>			
Relative permittivity (100Hz)	<b>3.8</b>	-	IEC 60250
Relative permittivity (1 MHz)	<b>3.5</b>	-	IEC 60250
Dissipation factor (100 Hz)	<b>20</b>	E-4	IEC 60250
Dissipation factor (1 MHz)	<b>110</b>	E-4	IEC 60250
Volume resistivity	<b>&gt;1E13</b>	Ohm*m	IEC 60093
Surface resistivity	<b>&gt;1E15</b>	Ohm	IEC 60093
Comparative tracking index	<b>250</b>	-	IEC 60112
<b>OTHER PROPERTIES</b>			
Water absorption	<b>0.3</b>	%	Sim. to ISO 62
Humidity absorption	<b>0.12</b>	%	Sim. to ISO 62
Density	<b>1780</b>	kg/m <sup>3</sup>	ISO 1183

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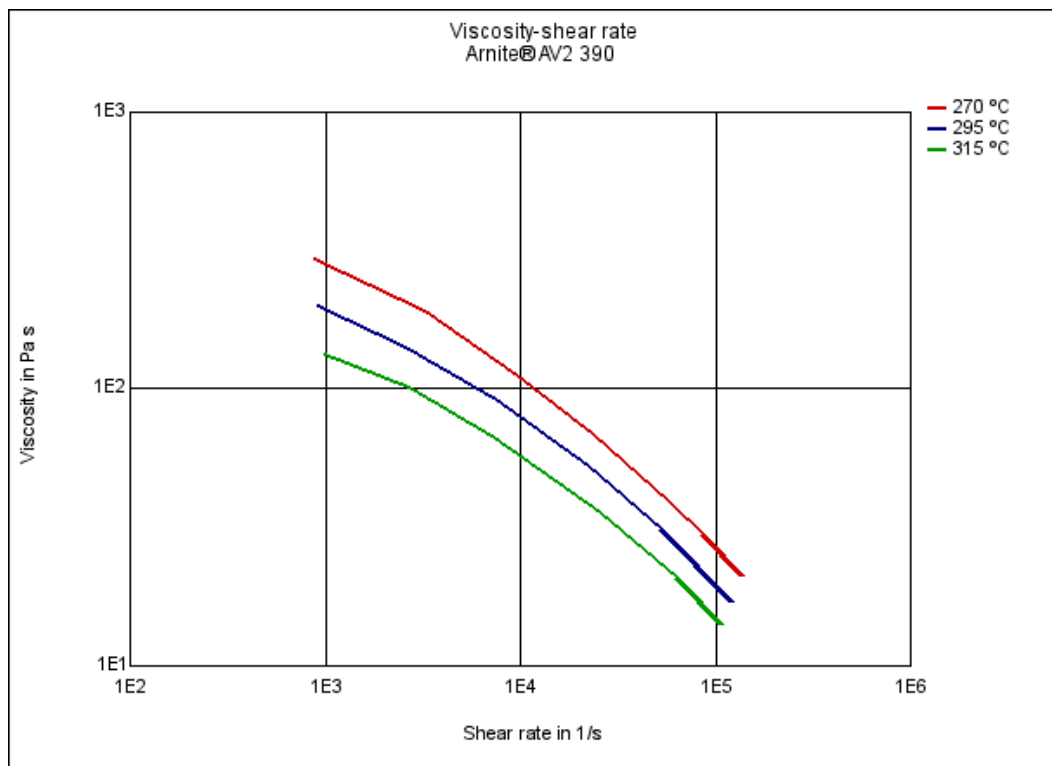
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## VISCOSITY-SHEAR RATE



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