

# Arnite® TV4 240

## PBT-GF20

20% Glass Reinforced

Print Date: 2022-12-09

Properties	Typical Data	Unit	Test Method
<b>Rheological properties</b>		<b>Value</b>	
Melt volume-flow rate	23	cm <sup>3</sup> /10min	ISO 1133
Temperature	250	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [normal]	1.3	%	Sim. to ISO 294-4
Molding shrinkage [parallel]	0.45	%	Sim. to ISO 294-4
<b>Mechanical properties</b>		<b>Value</b>	
Tensile modulus	7200	MPa	ISO 527-1/-2
Stress at break	120	MPa	ISO 527-1/-2
Strain at break	3	%	ISO 527-1/-2
Charpy impact strength (+23°C)	35	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	35	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	7	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	7	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>		<b>Value</b>	
Melting temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	205	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.4	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.8	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10

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## Property Data

# Arnite<sup>®</sup> TV4 240

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Properties	Typical Data	Unit	Test Method
Burning Behav. at 3.0 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
Oxygen index	20	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	725	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.8	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	700	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.6	mm	IEC 60695-2-12

### Electrical properties

#### Value

Relative permittivity (100Hz)	3.7	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.5	-	IEC 62631-2-1
Dissipation factor (100 Hz)	20	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	180	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Electric strength	30	kV/mm	IEC 60243-1
Comparative tracking index	400	V	IEC 60112

### Other properties

#### Value

Water absorption	0.3	%	Sim. to ISO 62
Humidity absorption	0.15	%	Sim. to ISO 62
Density	1450	kg/m <sup>3</sup>	ISO 1183

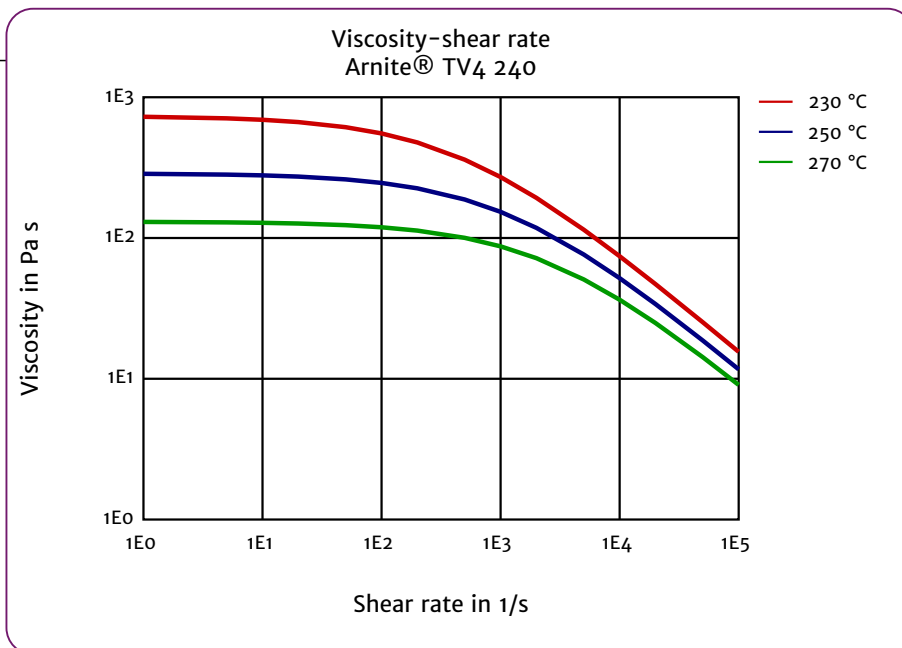
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## Viscosity-shear rate



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