


**Technyl® C 218 V50**

PA6-GF50

Solvay Engineering Plastics

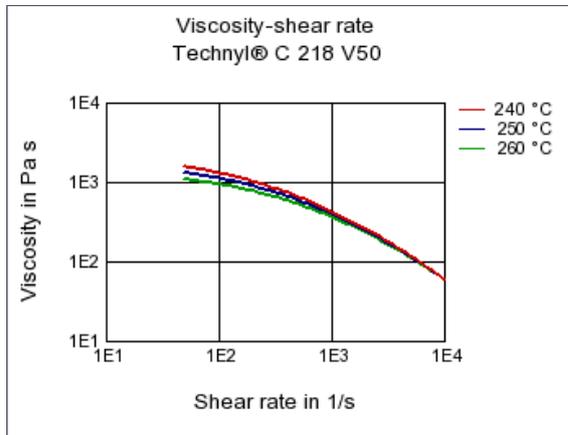
**Product Texts**

Polyamide 6, 50 % glass fibre reinforced, heat stabilised

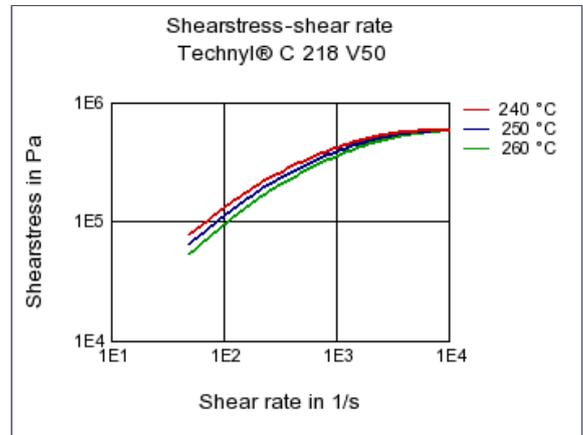
<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	14600 / 8600	MPa	ISO 527-1/-2
Stress at break	225 / -	MPa	ISO 527-1/-2
Strain at break	2 / -	%	ISO 527-1/-2
Charpy impact strength (+23°C)	107 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	19 / -	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	55 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	215 / *	°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	18 / *	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	IEC 60695-11-10
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 1MHz	3.8 / 4.5	-	IEC 60250
Dissipation factor, 1MHz	200 / -	E-4	IEC 60250
Volume resistivity	1E13 / 1E9	Ohm*m	IEC 60093
Surface resistivity	* / 1E11	Ohm	IEC 60093
Electric strength	- / 22	kV/mm	IEC 60243-1
Comparative tracking index	475 / -	-	IEC 60112
<b>Other properties</b>			
<b>ISO Data</b>			
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1560 / -	kg/m <sup>3</sup>	ISO 1183

Diagrams

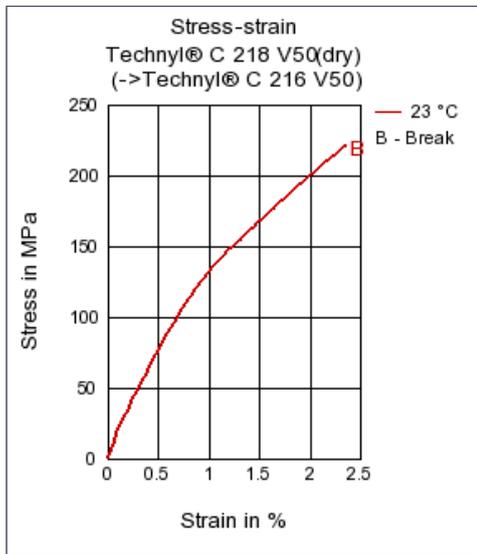
Viscosity-shear rate



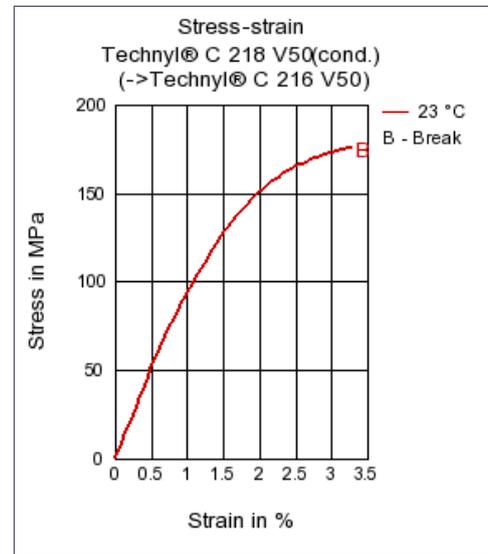
Shearstress-shear rate



Stress-strain



Stress-strain



Characteristics

Processing

Injection Molding

Other text information

Injection Molding

PROCESSING

Melt temperature: 225°C

Mold temperature: 80°C

Chemical Media Resistance

Acids

- 😊 Acetic Acid (5% by mass) (23°C)
- 😊 Citric Acid solution (10% by mass) (23°C)
- 😊 Lactic Acid (10% by mass) (23°C)
- 🚫 Hydrochloric Acid (36% by mass) (23°C)
- 🚫 Nitric Acid (40% by mass) (23°C)
- 🚫 Sulfuric Acid (38% by mass) (23°C)
- 🚫 Sulfuric Acid (5% by mass) (23°C)
- 🚫 Chromic Acid solution (40% by mass) (23°C)

**Bases**

-  Sodium Hydroxide solution (35% by mass) (23°C)
-  Sodium Hydroxide solution (1% by mass) (23°C)
-  Ammonium Hydroxide solution (10% by mass) (23°C)

**Alcohols**

-  Isopropyl alcohol (23°C)
-  Methanol (23°C)
-  Ethanol (23°C)

**Hydrocarbons**

-  n-Hexane (23°C)
-  Toluene (23°C)
-  iso-Octane (23°C)

**Ketones**

-  Acetone (23°C)

**Ethers**

-  Diethyl ether (23°C)

**Mineral oils**

-  SAE 10W40 multigrade motor oil (23°C)

**Standard Fuels**

-  Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
-  Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)

**Salt solutions**

-  Zinc Chloride solution (50% by mass) (23°C)

**Other**

-  Ethylene Glycol (50% by mass) in water (108°C)
-  50% Oleic acid + 50% Olive Oil (23°C)
-  Water (23°C)
-  Deionized water (90°C)