Technyl® AFX 218 V60

PA66-GF60 Solvay Engineering Plastics

Product Texts

High Flow Polyamide 66 reinforced with 60% of glass fibre, heat stabilized, for injection moulding.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.4 / *	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	22000 / 18000	MPa	ISO 527-1/-2
Stress at break	268 / 195	MPa	ISO 527-1/-2
Strain at break	2.1 / 3.1	%	ISO 527-1/-2
Charpy impact strength (+23°C)	18 / 22	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	98 / -	kJ/m²	ISO 179/1eA

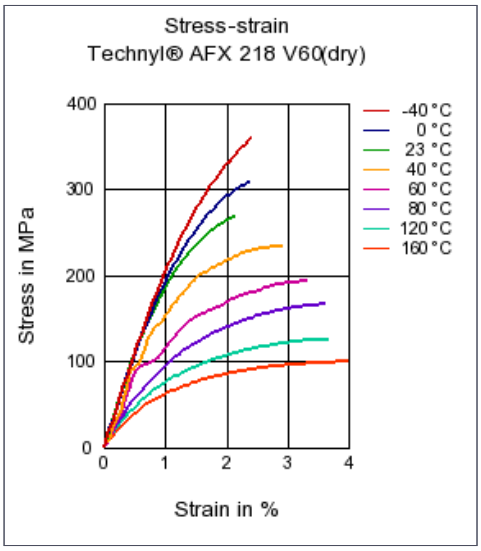
Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature (10°C/min)	264 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	257 / *	°C	ISO 75-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Volume resistivity	>1E13 / -	Ohm*m	IEC 60093
Electric strength	40 / -	kV/mm	IEC 60243-1
Comparative tracking index	550 / -	-	IEC 60112

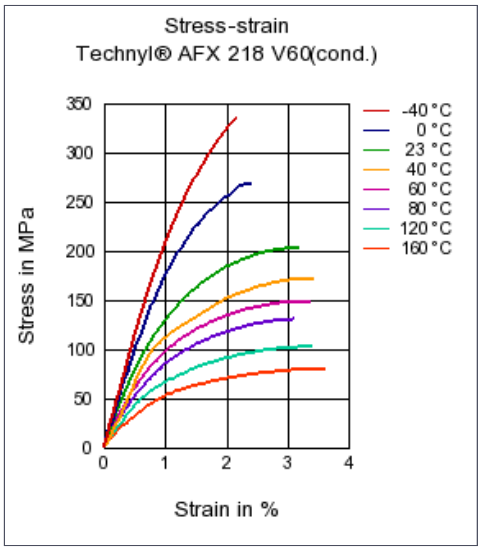
Other properties	dry / cond	Unit	Test Standard
ISO Data			
Humidity absorption	0.6 / *	%	Sim. to ISO 62
Density	1690 / -	kg/m³	ISO 1183

Diagrams

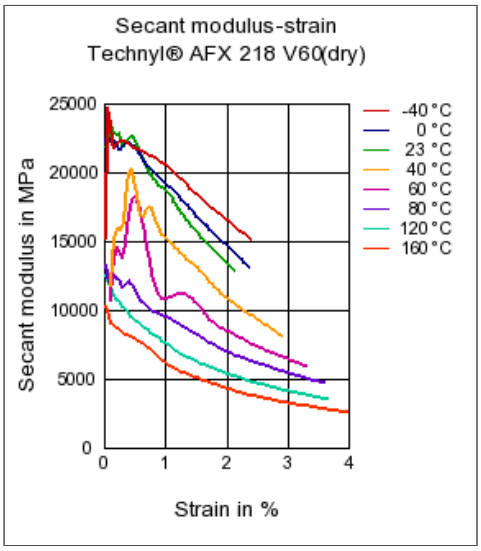
Stress-strain



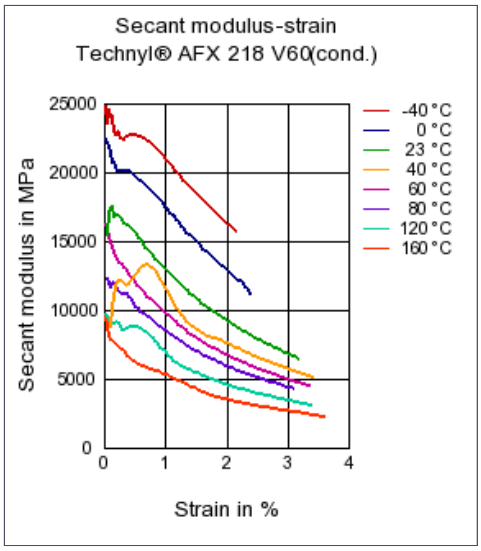
Stress-strain



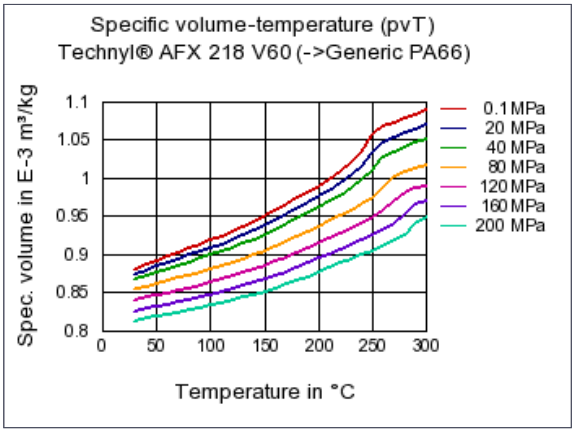
Secant modulus-strain



Secant modulus-strain



Specific volume-temperature (pvT)



Other text information

Injection Molding

The material is supplied in airtight bags, ready for use. In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content less than 0.2% with a dehumidified air drying equipment at approx. 80°C.

Recommended moulding conditions:

-Barrel temperatures:

-feed zone 260-270°C
-compression zone 270-280°C
-front zone 280-290°C
-Mould temperatures: 60-90°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 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)