Technyl® AFX 218 V50

PA66-GF50 Solvay Engineering Plastics

Product Texts

High Flow Polyamide 66 reinforced with 50% 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

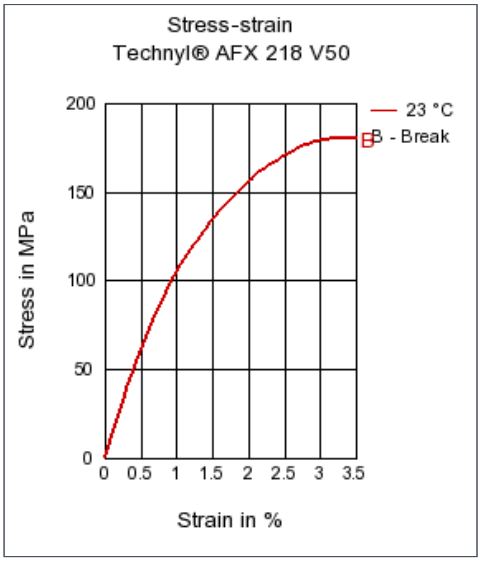
Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	17000 / 12500	MPa	ISO 527-1/-2
Stress at break	255 / 180	MPa	ISO 527-1/-2
Strain at break	2.5 / 3.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	100 / 104	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	15 / -	kJ/m²	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)	256 / *	°C	ISO 75-1/-2
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-

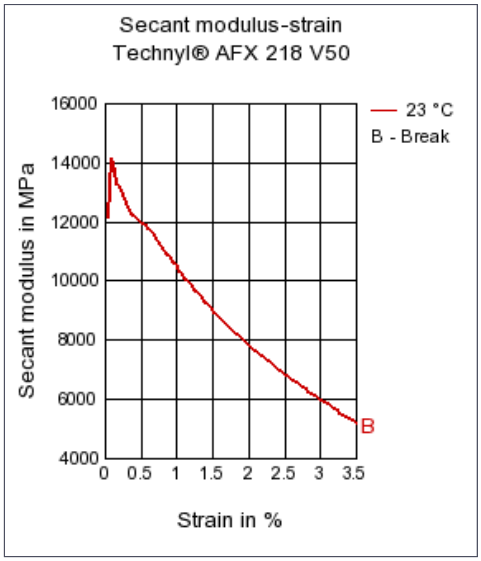
Other properties	dry / cond	Unit	Test Standard
ISO Data			
Humidity absorption	0.6 / *	%	Sim. to ISO 62
Density	1570 / -	kg/m³	ISO 1183

Diagrams

Stress-strain



Secant modulus-strain



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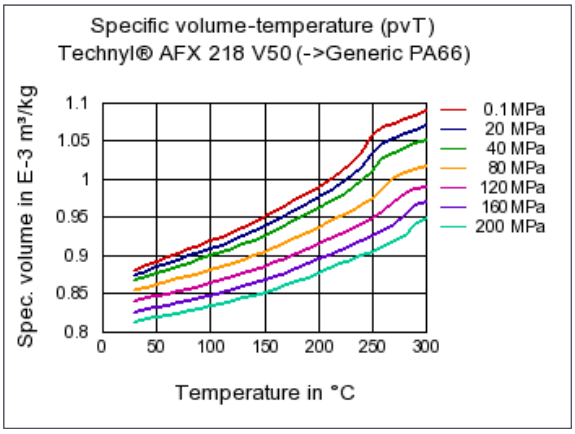
Specific volume-temperature (pvT)



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

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)

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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)