Technyl® eXten D 238 V30

PA610-I-GF30 Solvay Engineering Plastics

Product Texts

TECHNYL® eXten D 238 V30 is a PA6.10 30% glass fibre reinforced and impact modified suitable for injection moulding.

TECHNYL® eXten D 238 V30 is based on a partially bio-sourced polyamide 6,10.

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.5 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6 / *	%	ISO 294-4, 2577

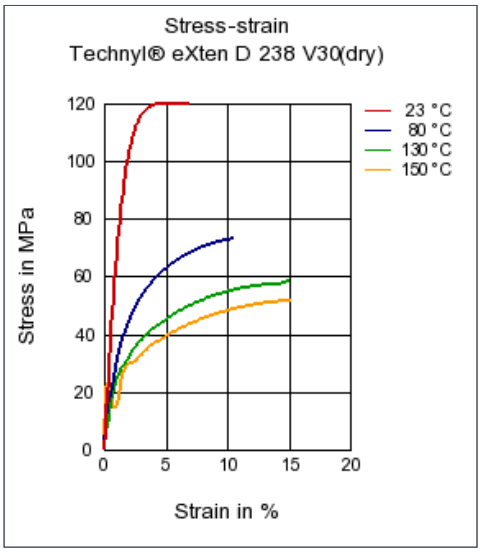
Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	7400 / 5200	MPa	ISO 527-1/-2
Stress at break	120 / 90	MPa	ISO 527-1/-2
Strain at break	5 / 8	%	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / -	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	90 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	27 / 31	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	15 / 18	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature (10°C/min)	215 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	190 / *	°C	ISO 75-1/-2
Thickness tested	1.6 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10

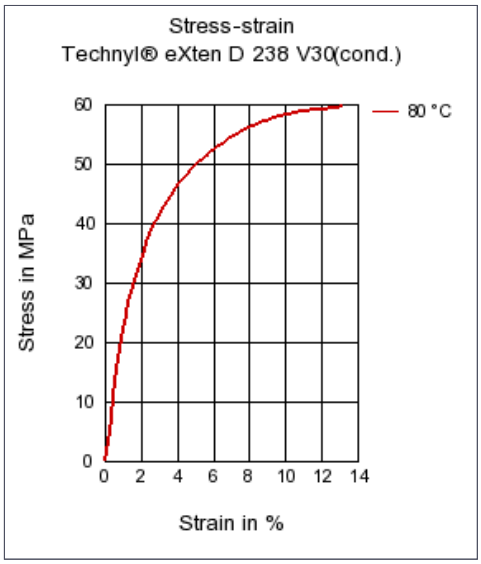
Other properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	1.6 / *	%	Sim. to ISO 62
Humidity absorption	0.34 / *	%	Sim. to ISO 62
Density	1250 / -	kg/m³	ISO 1183

Diagrams

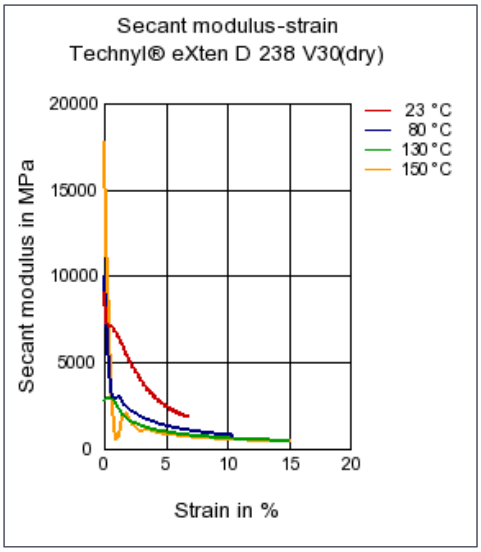
Stress-strain



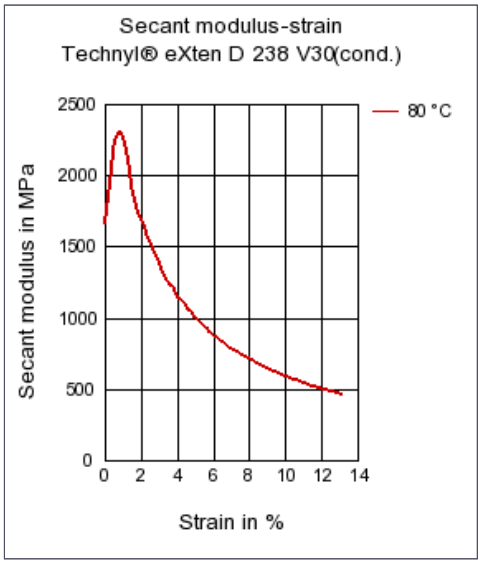
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Special Characteristics

High impact or impact modified

Ecological valuation

Contains renewable resources

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 approximately 80°C.

Recommended moulding conditions:

-Barrel temperatures
Feed zone 225-230°C
Compression zone 230-240°C
Front zone 240-250°C

-Mould temperatures 80-100°C

Chemical Media Resistance

Acids

- Acetic Acid (5% by mass) (23°C)
- Sulfuric Acid (38% by mass) (23°C)
- Sulfuric Acid (5% by mass) (23°C)

Alcohols

- Ethanol (23°C)

Hydrocarbons

- Toluene (23°C)

Ketones

- Acetone (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

- Hydrogen peroxide (23°C)
- Ethylene Glycol (50% by mass) in water (108°C)
- 50% Oleic acid + 50% Olive Oil (23°C)
- Deionized water (90°C)
- Phenol solution (5% by mass) (23°C)