

CELANYL® A3 WR GF30 BK 9005/Z/FA

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Designed for any technical application requiring long term heat resistance packed with prime quality mechanical performances. Suitable for drinking water applications.

Product information

Resin Identification	PA66-GF30	ISO 1043
Part Marking Code	>PA66-GF30<	ISO 11469
Continuous Service Temperature	120 °C	IEC 60216-1

Rheological properties

	dry/cond.		
Moulding shrinkage, parallel	0.3 / -	%	ISO 294-4, 2577
Moulding shrinkage, normal	0.5 / -	%	ISO 294-4, 2577

Typical mechanical properties

	dry/cond.		
Tensile modulus	10200 / -	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	190 / -	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3.4 / -	%	ISO 527-1/-2
Charpy impact strength, 23 °C	80 / -	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	10 / -	kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23 °C	11 / -	kJ/m ²	ISO 180/1A
Poisson's ratio	0.34 / - ^[C]		
[C]: Calculated			

Flammability

	dry/cond.		
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	yes / *		UL 94

Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.5 / *	%	Sim. to ISO 62
Water absorption, 2mm	5.5 / *	%	Sim. to ISO 62
Density	1370 / -	kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.15 %
Melt Temperature Optimum	295 °C
Min. melt temperature	285 °C
Max. melt temperature	305 °C
Screw tangential speed	≤0.2 m/s
Mold Temperature Optimum	100 °C
Min. mould temperature	70 °C
Max. mould temperature	120 °C

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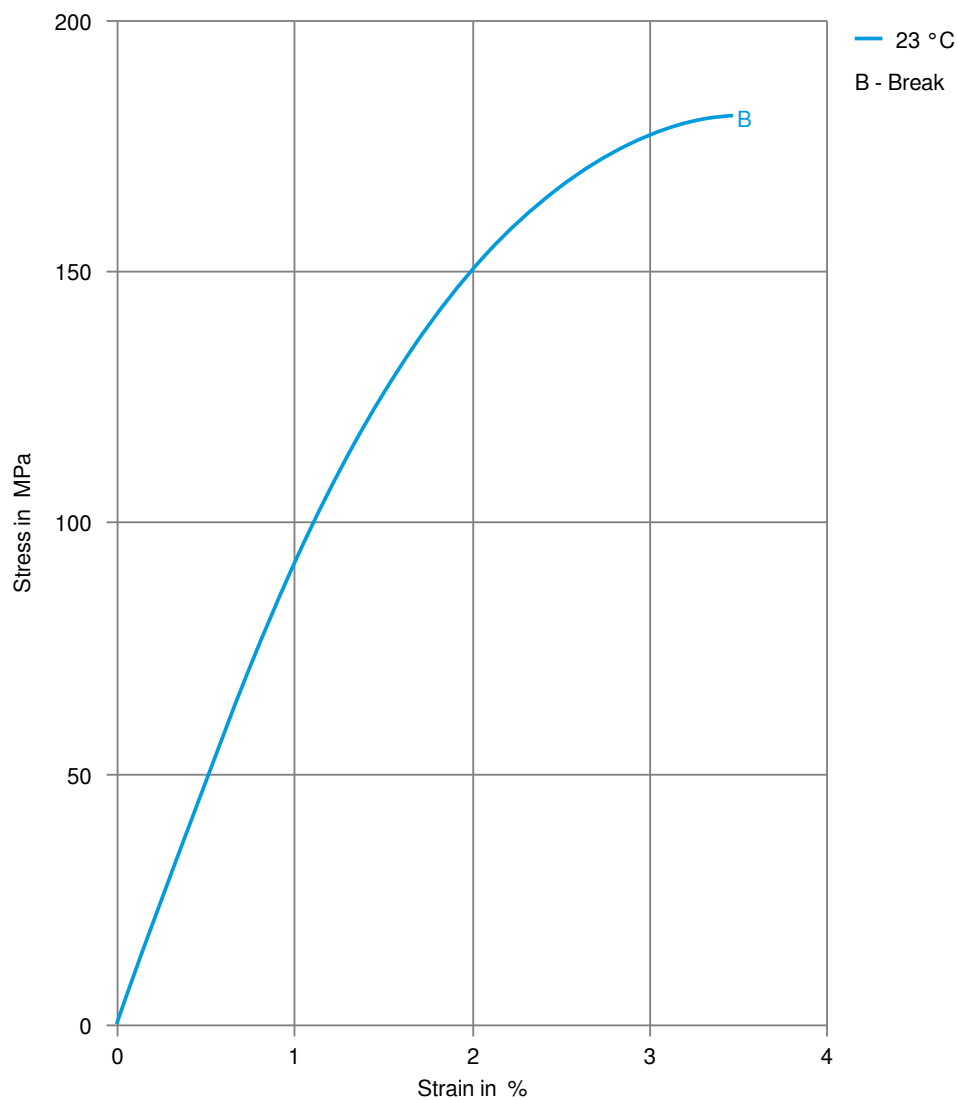
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Characteristics

Processing

Injection Moulding

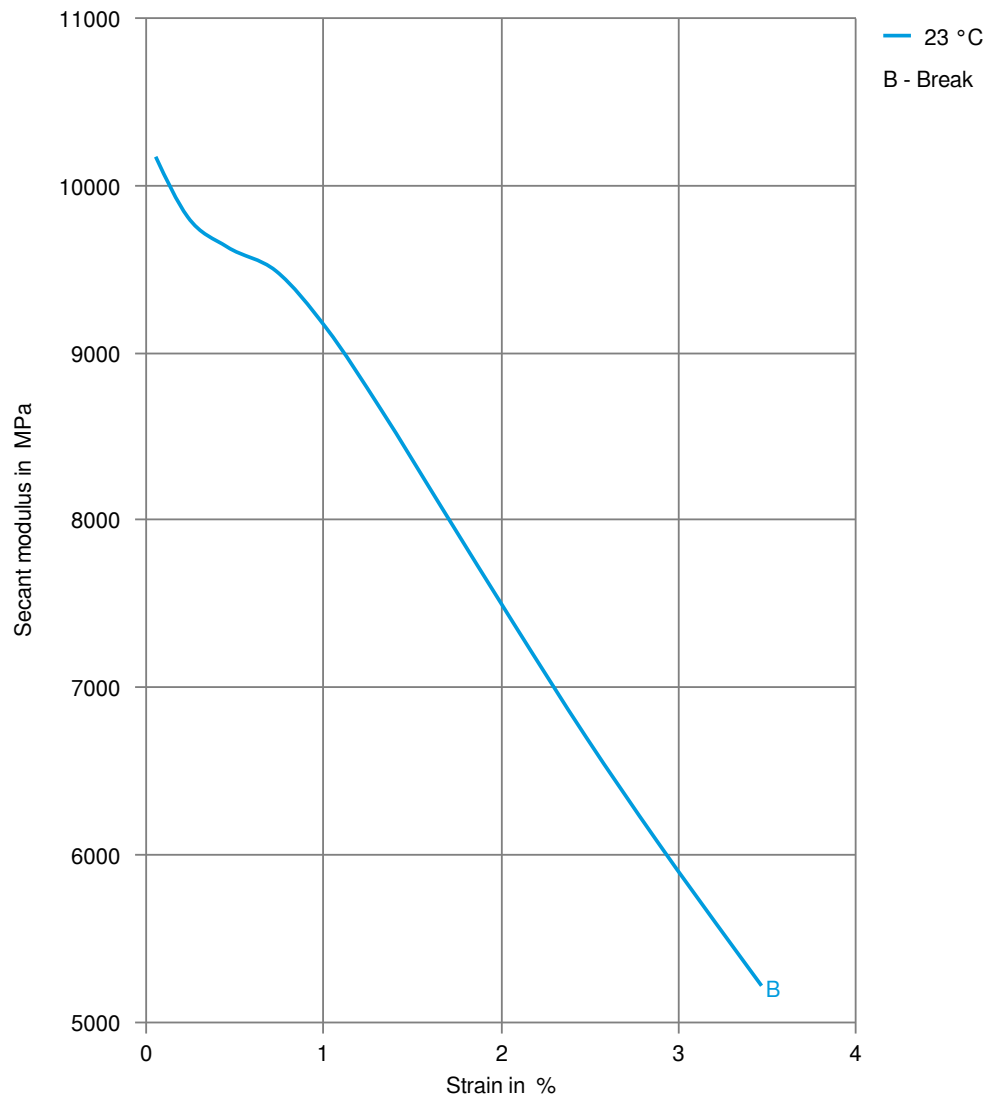
Stress-strain (dry)



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Secant modulus-strain (dry)



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Chemical Media Resistance

Salt solutions

- ✓ Sodium Hypochlorite solution (10% by mass), 23°C

Symbols used:

- ✓ possibly resistant
Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).
- ✗ not recommended - see explanation
Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).