

# CELANYL® A3 HH J10 GF13 NC 1102/E

## CELANYL®

Car industry, Household appliances, Electrical devices.

### Product information

Resin Identification	PA66-I-GF13	ISO 1043
Part Marking Code	>PA66-I-GF13<	ISO 11469
Continuous Service Temperature	130 °C	IEC 60216-1

### Rheological properties

	dry/cond.	
Moulding shrinkage, parallel	0.6 / -	%
Moulding shrinkage range, parallel	0.4 - 0.7	%
Moulding shrinkage, normal	0.8 / -	%
Moulding shrinkage range, normal	0.7 - 1	%

### Typical mechanical properties

	dry/cond.	
Tensile modulus	5200 / 3000	MPa
Tensile stress at break, 5mm/min	110 / 70	MPa
Tensile strain at break, 5mm/min	5 / 10	%
Flexural modulus	4900 / 2700	MPa
Flexural strength	180 / 95	MPa
Charpy impact strength, 23°C	70 / >80	kJ/m <sup>2</sup>
Charpy notched impact strength, 23°C	12 / 20	kJ/m <sup>2</sup>
Izod notched impact strength, 23°C	10 / -	kJ/m <sup>2</sup>
Poisson's ratio	0.35 / 0.37 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

	dry/cond.	
Melting temperature, 10°C/min	262 / *	°C
Temperature of deflection under load, 1.8 MPa	235 / *	°C

### Flammability

	dry/cond.	
Burning Behav. at thickness h	HB / *	class
Thickness tested	0.8 / *	mm
Glow Wire Flammability Index, 0.75mm	650 / -	°C
Glow Wire Flammability Index, 3.0mm	650 / -	°C

### Physical/Other properties

	dry/cond.	
Humidity absorption, 2mm	1.7 / *	%
Water absorption, 2mm	6.2 / *	%
Density	1200 / -	kg/m <sup>3</sup>

### 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

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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

## Characteristics

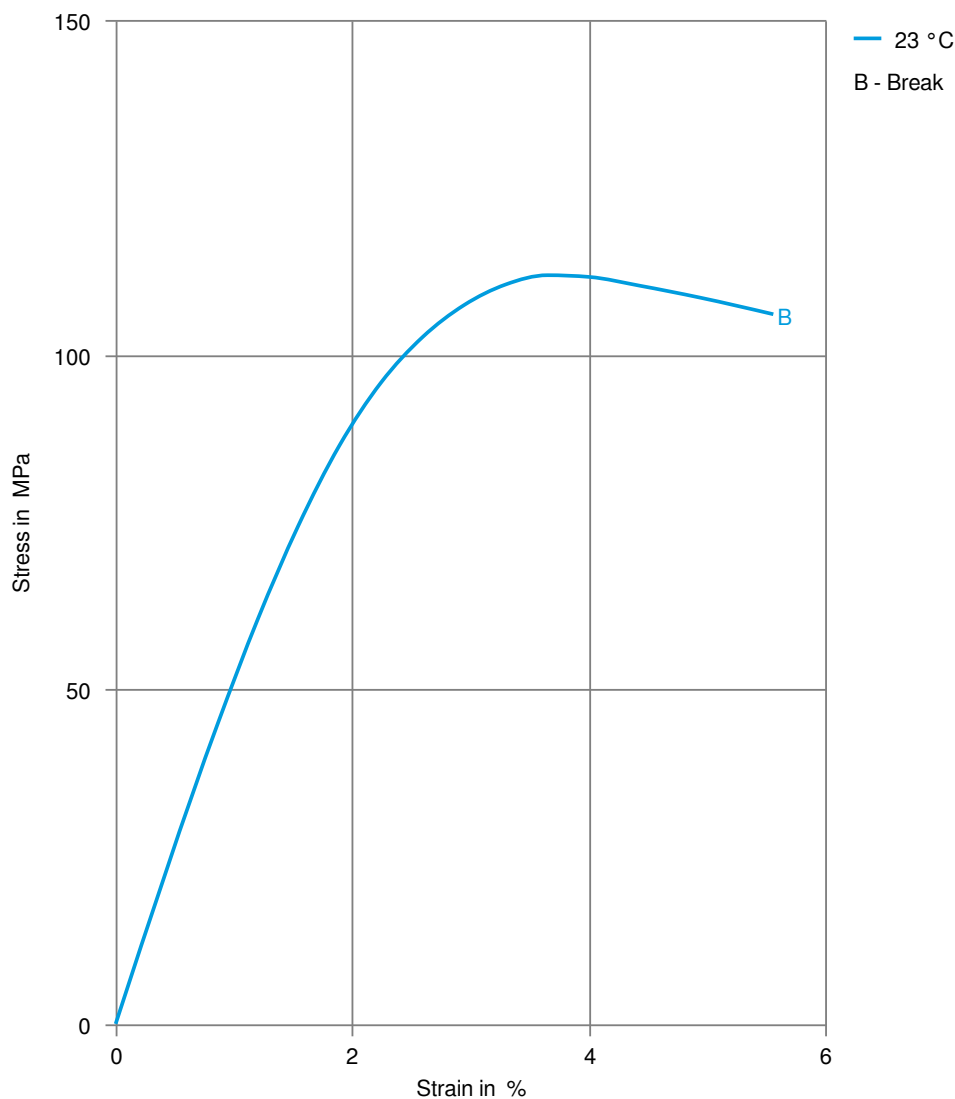
Processing

Injection Moulding

Special characteristics

High impact or impact modified, Heat stabilised or stable to heat

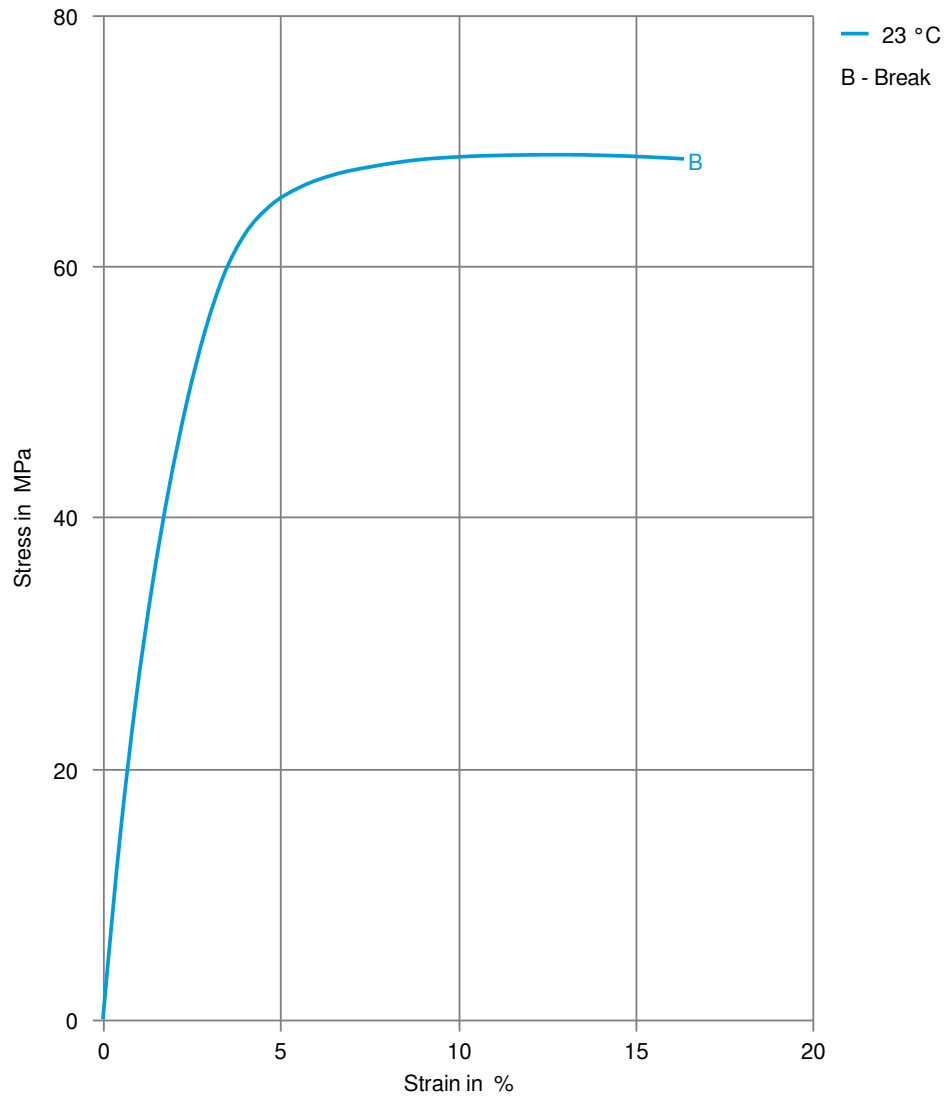
## Stress-strain (dry)



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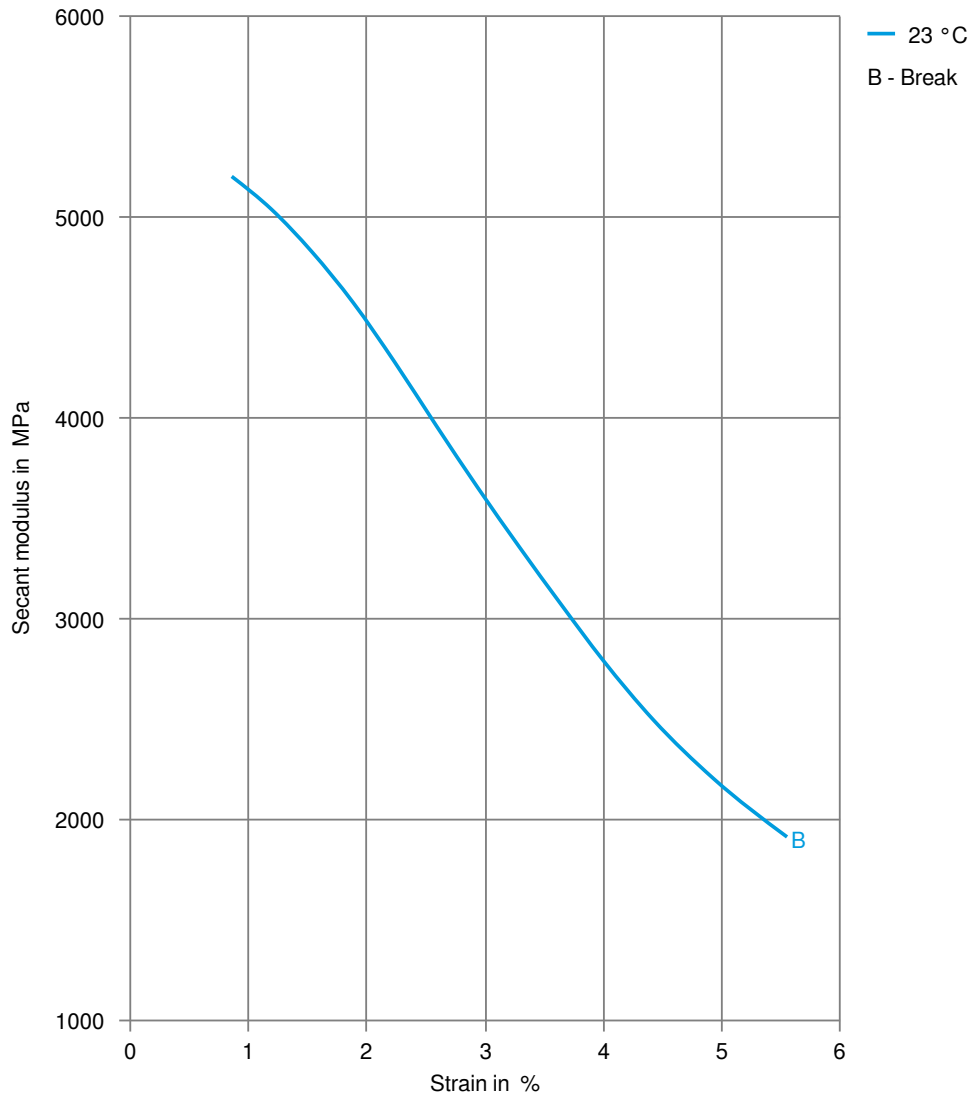
### Stress-strain (cond.)



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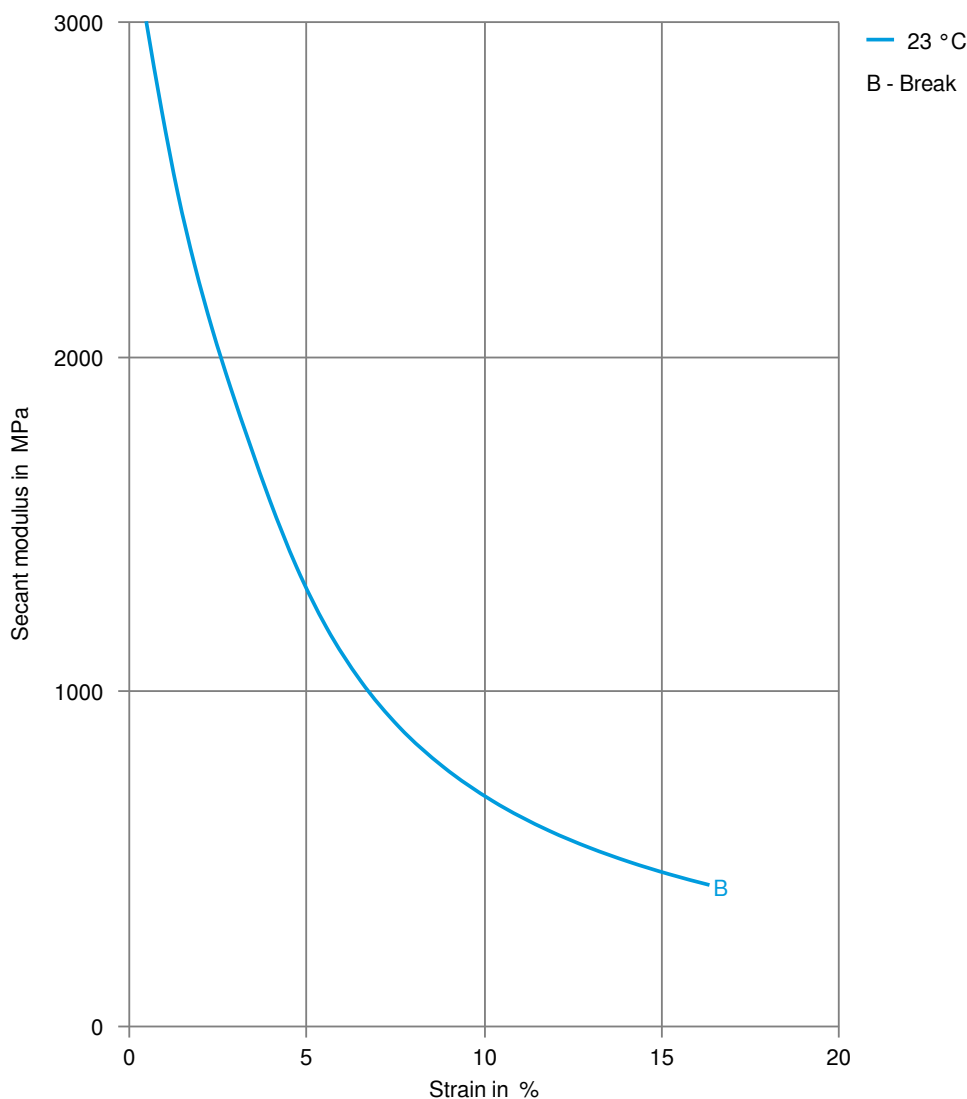
### Secant modulus-strain (dry)



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### Secant modulus-strain (cond.)



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