

# Zytel® FN718 BK230A

## NYLON RESIN

Zytel® FN718 BK230A is a flexible polyamide 66 resin.

### Product information

Resin Identification	PA66-F	ISO 1043
Part Marking Code	>PA66-F<	ISO 11469
ISO designation	ISO 16396-PA66-F,,M1CG1,S14-010	

### Typical mechanical properties

	dry/cond.		
Tensile modulus	900 / 440	MPa	ISO 527-1/-2
Tensile stress at 50% strain	33 / 21	MPa	ISO 527-1/-2
Flexural modulus	900 / -	MPa	ISO 178
Charpy notched impact strength, 23°C	105 / -	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -40°C	30 / -	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23°C	95 / -	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -40°C	25.0 / -	kJ/m <sup>2</sup>	ISO 180/1A
Poisson's ratio	0.45 / 0.47		

### Thermal properties

	dry/cond.		
Melting temperature, 10°C/min	263 / *	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	50 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	68 / *	°C	ISO 75-1/-2

### Flammability

FMVSS Class	B	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<80 mm/min	ISO 3795 (FMVSS 302)

### Physical/Other properties

	dry/cond.		
Humidity absorption, 2mm	1.4 / *	%	Sim. to ISO 62
Density	1040 / -	kg/m <sup>3</sup>	ISO 1183

### Injection

Drying Recommended	yes
Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	285 °C
Min. melt temperature	275 °C
Max. melt temperature	295 °C
Mold Temperature Optimum	60 °C
Min. mould temperature	40 °C
Max. mould temperature	80 °C

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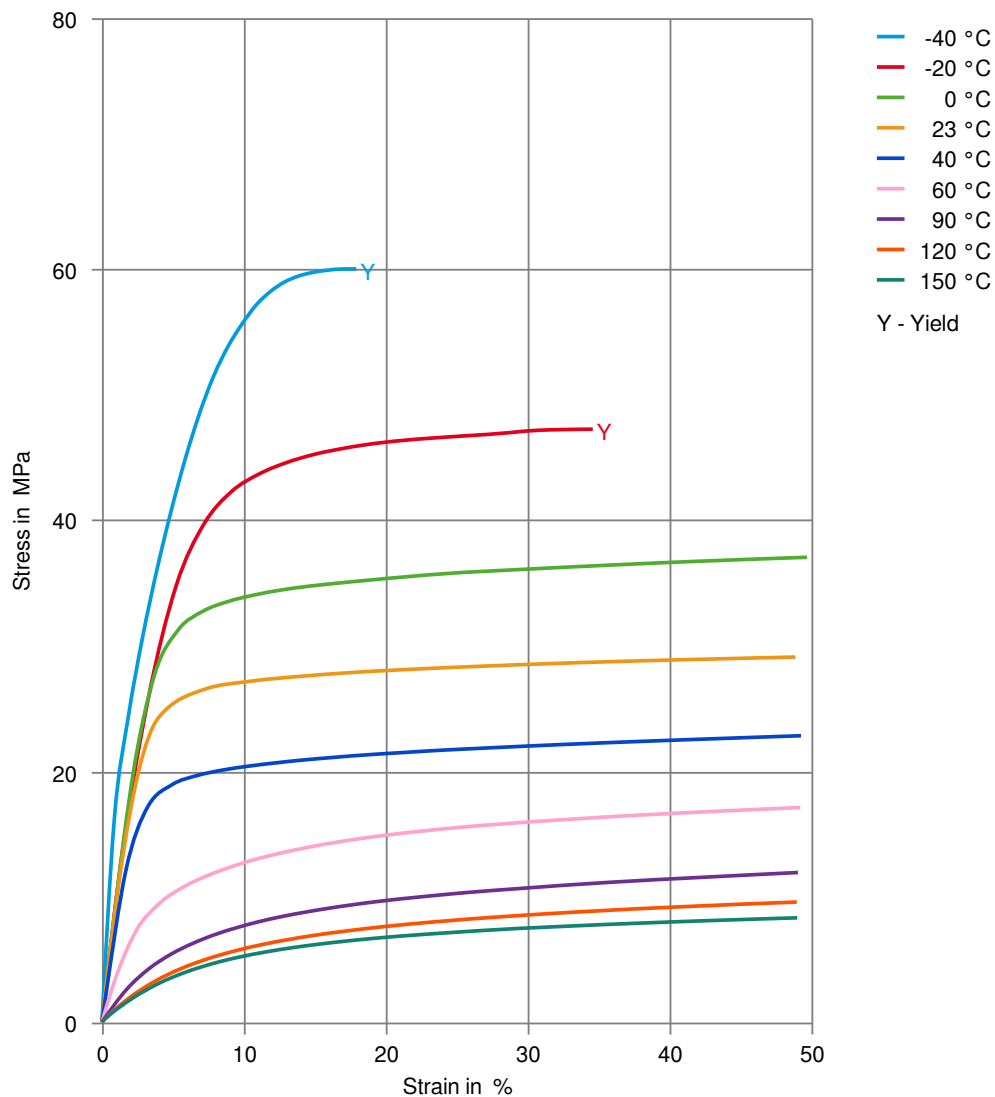
### Extrusion

Drying Temperature	80 °C
Drying Time, Dehumidified Dryer	4 - 6 h
Processing Moisture Content	≤0.06 %
Melt Temperature Range	275 - 290 °C

### Characteristics

Processing	Injection Moulding, Extrusion
Delivery form	Pellets

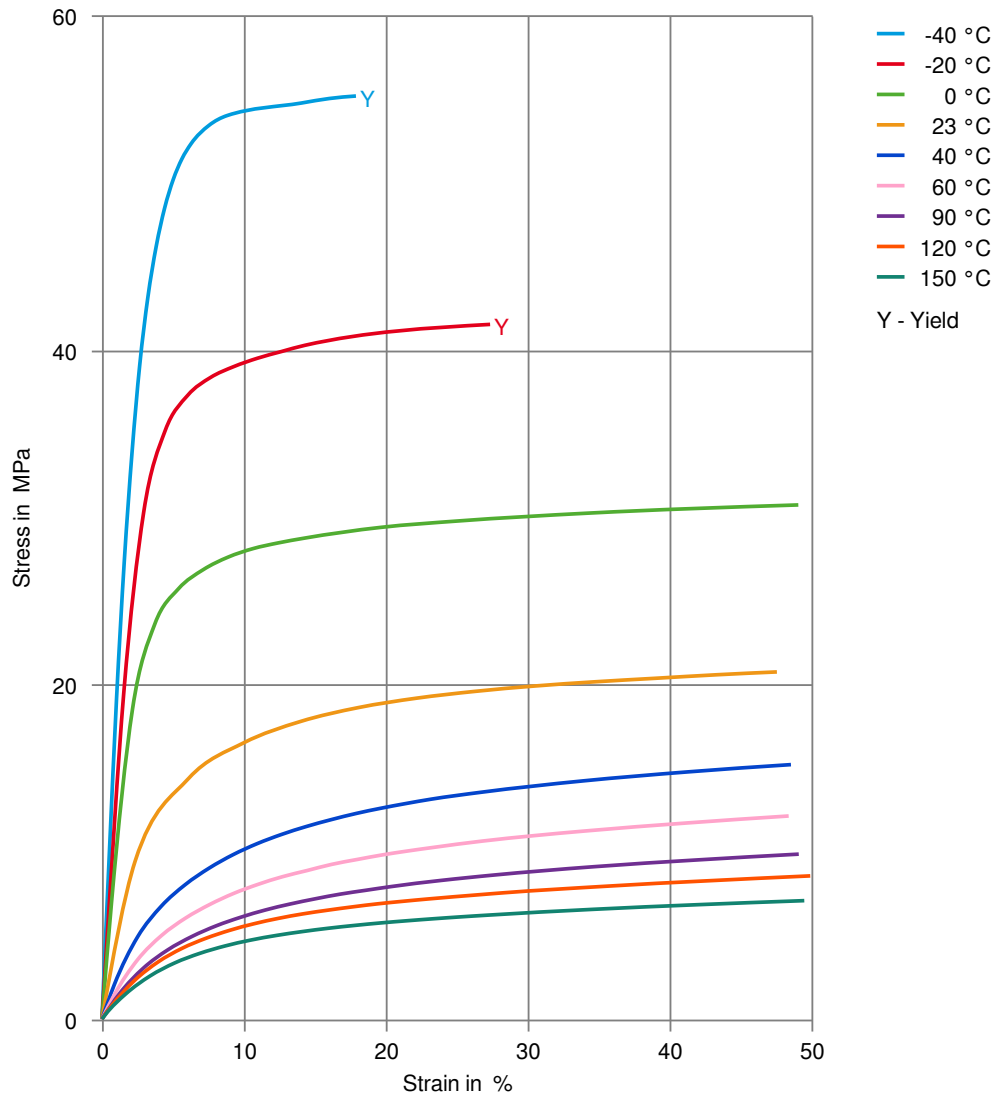
### Stress-strain (dry)



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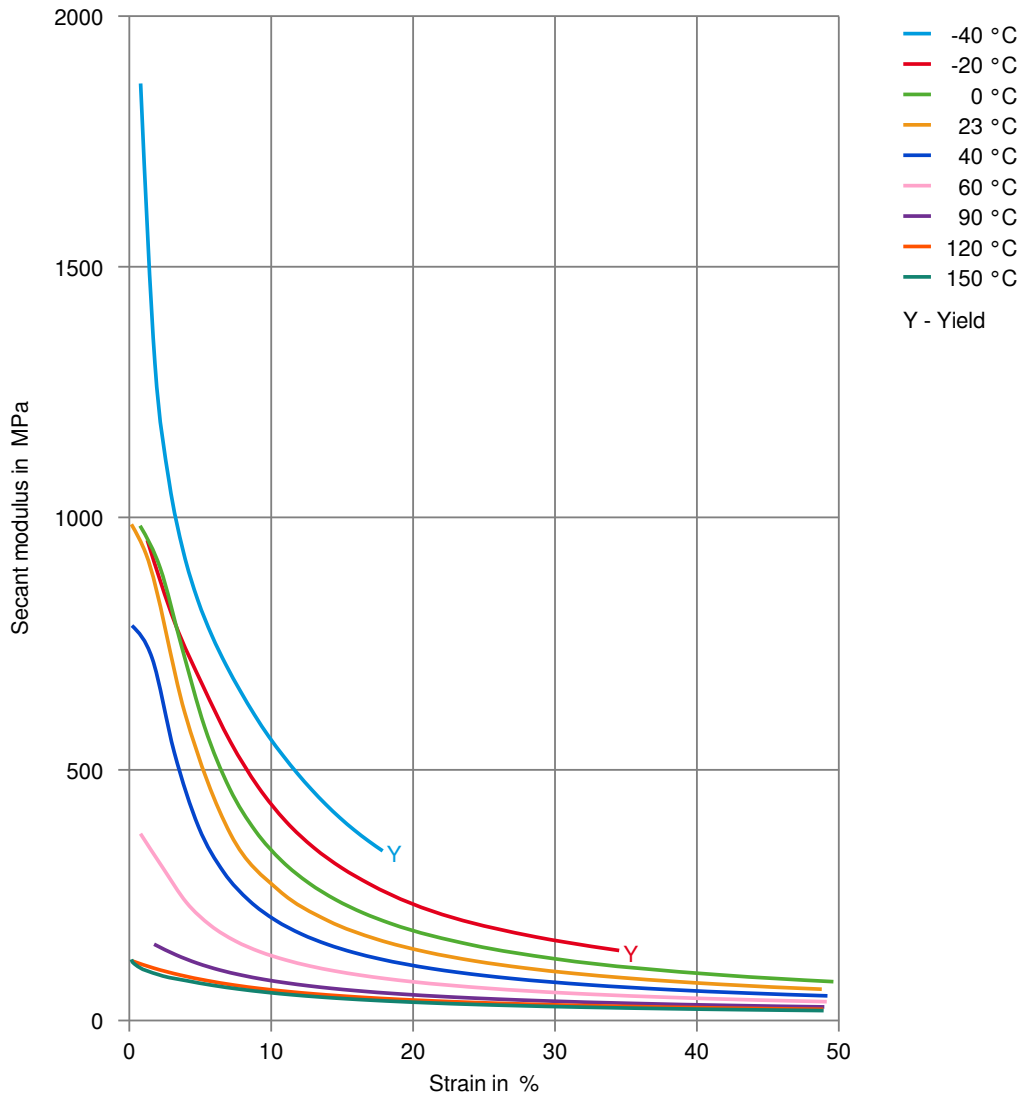
Stress-strain (cond.)



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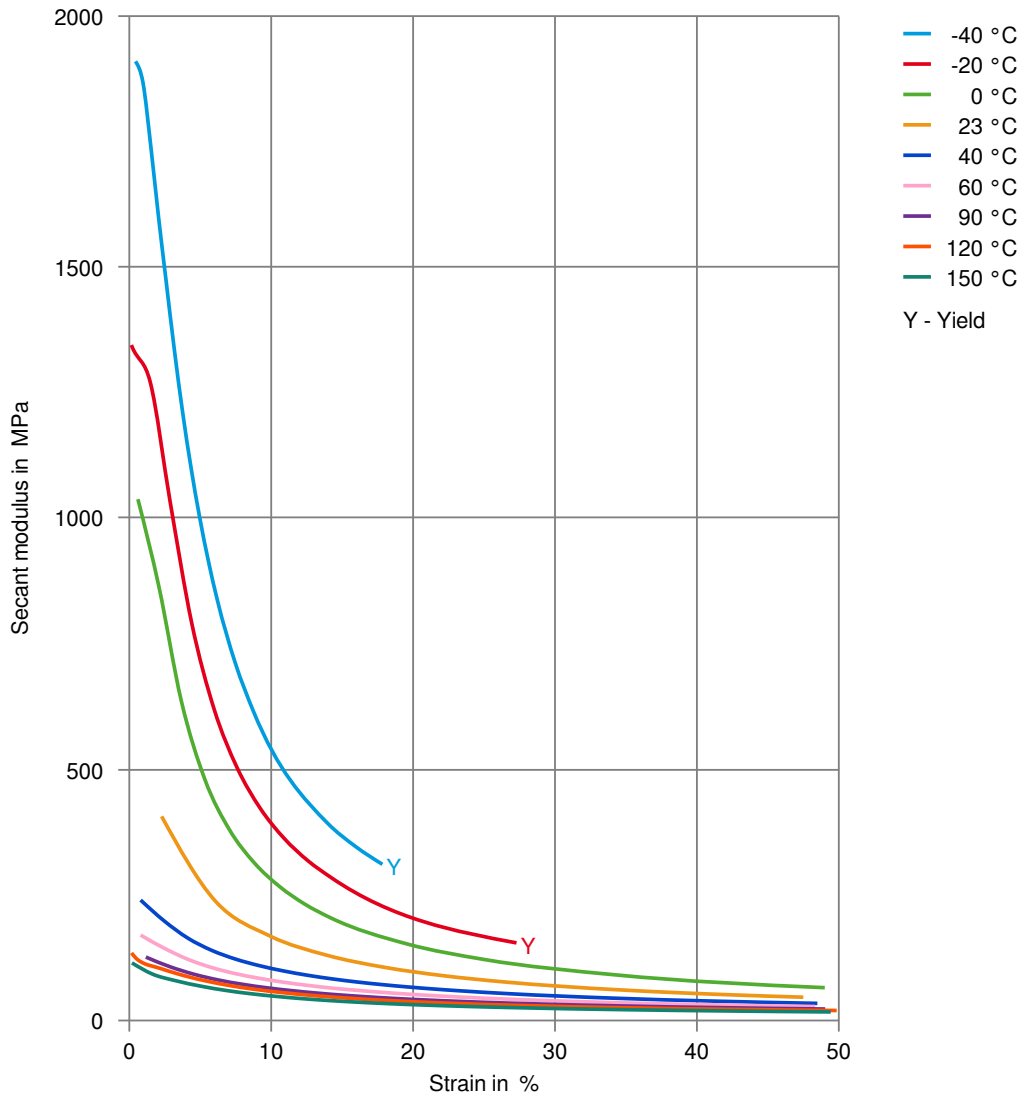
Secant modulus-strain (dry)



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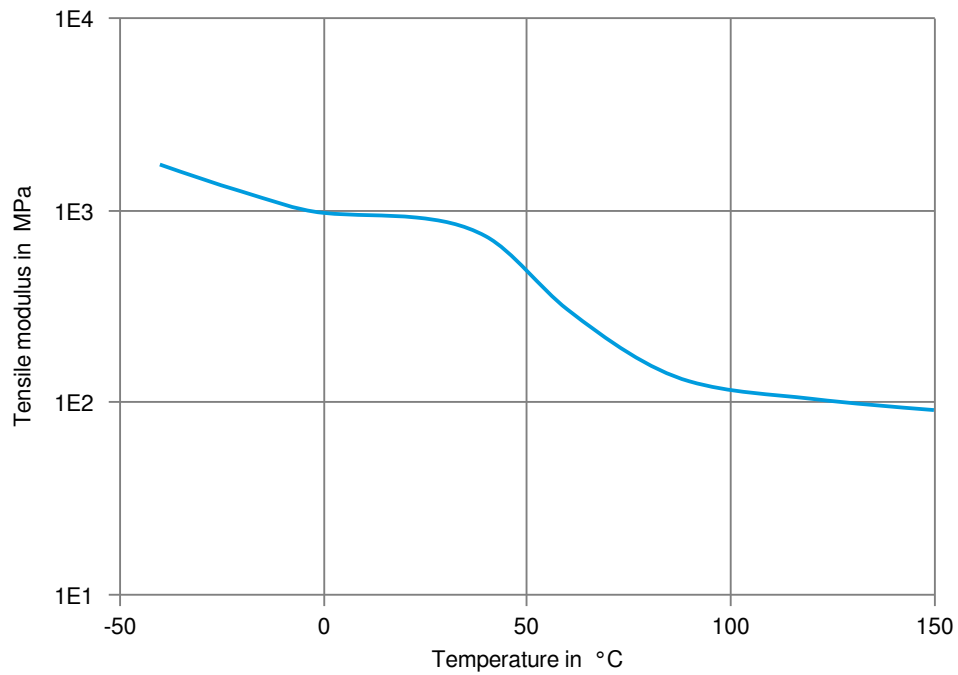
Secant modulus-strain (cond.)



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Tensile modulus-temperature (dry)



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Tensile modulus-temperature (cond.)

