

KEPITAL® F25-03HT

A friction & wear-resistance (medium-viscosity) grade for general injection molding
 Kepital® F25-03HT is a friction & wear-resistance (medium-viscosity) grade for general injection molding. Suitable for applications requiring reduced impact noise and good friction and wear resistance.

Rheological properties

Moulding shrinkage, parallel	2.0 %	ISO 294-4, 2577
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Typical mechanical properties

Tensile Modulus	2700 MPa	ISO 527-1/-2
Yield stress, 50mm/min	64 MPa	ISO 527-1/-2
Yield strain, 50mm/min	9 %	ISO 527-1/-2
Nominal strain at break	30 %	ISO 527-1/-2
Flexural Modulus	2600 MPa	ISO 178
Flexural Strength	90 MPa	ISO 178
Charpy notched impact strength, 23°C	6 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.405	

Thermal properties

Melting temperature, 10°C/min	170 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	100 °C	ISO 75-1/-2

Electrical properties

Electric strength	19 kV/mm	IEC 60243-1
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Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Density	1410 kg/m ³	ISO 1183

Injection

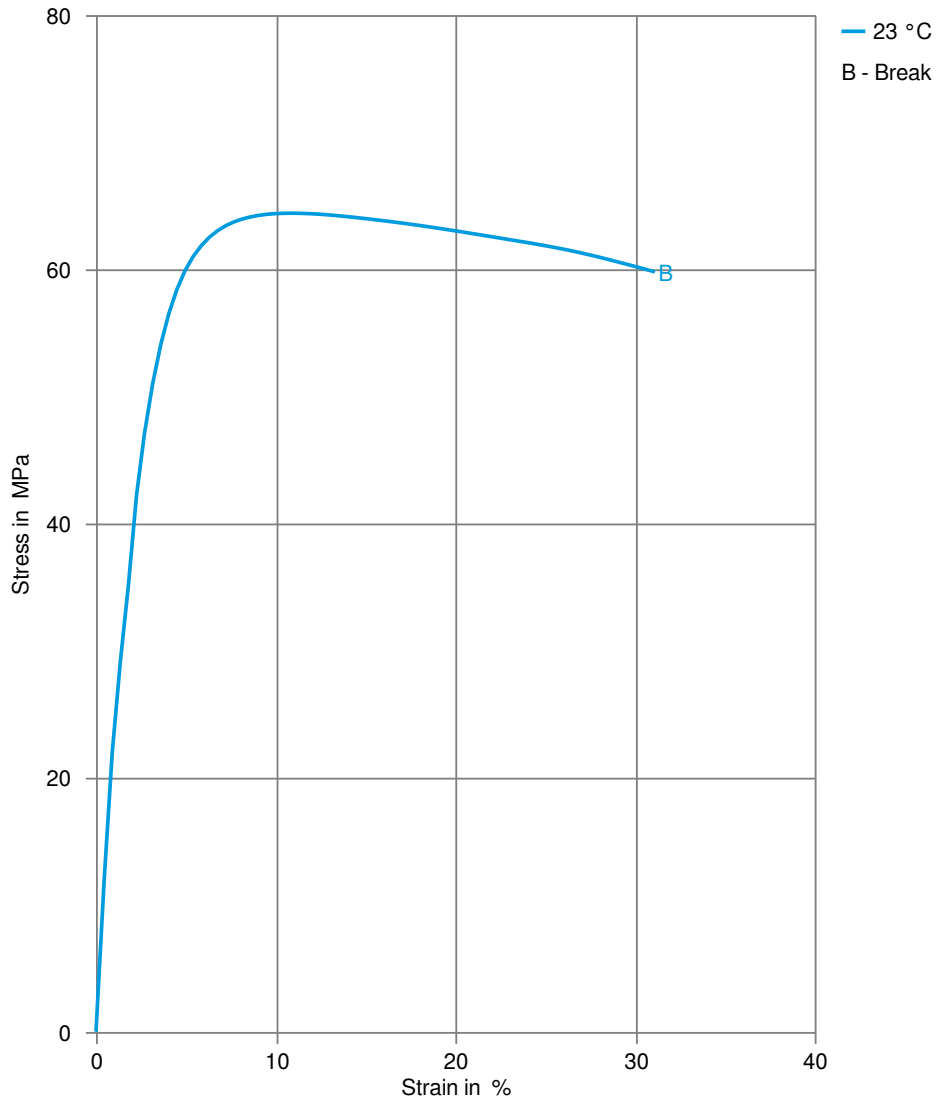
Drying Temperature	80 - 90 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	0.1 %
Max. mould temperature	60 - 80 °C
Back pressure	2 MPa

Additional information

Injection molding	mold temperature: 60°C ~ 80°C (140°F ~ 176°F)
	barrel temperature: 170°C ~ 190°C (338°F ~ 374°F)
	screw speed: 150mm/s ~ 200mm/s
	back pressure: max. 20 bar

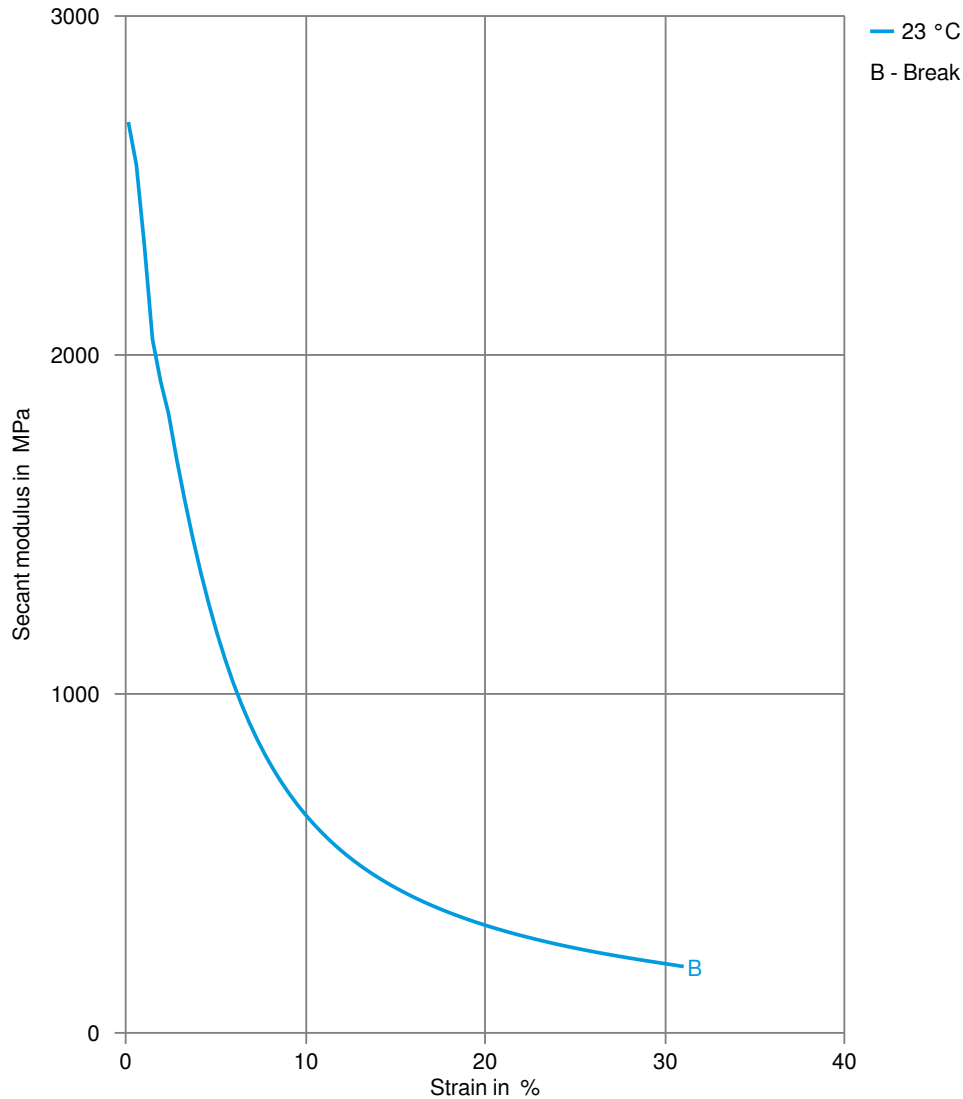
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Stress-strain



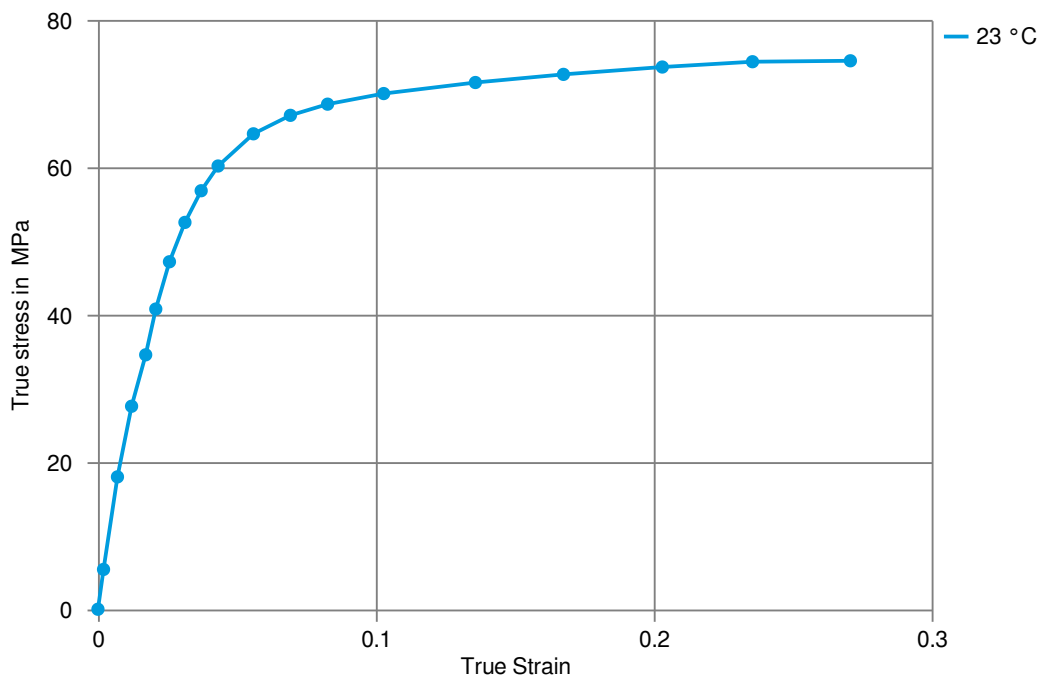
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Secant modulus-strain



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True stress-strain



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Processing Texts

Pre-drying

It is recommended to dry material at 80°C ~ 90°C (176°F ~ 194°F) for 3h ~ 4h if necessary.

suggest max. moisture: 0.1%

Injection molding

mold temperature: 60°C ~ 80°C (140°F ~ 176°F)

barrel temperature: 170°C ~ 190°C (338°F ~ 374°F)

screw speed: 150mm/s ~ 200mm/s

back pressure: max. 20 bar