

HOSTAFORM® C 9021 10/9005

HOSTAFORM®

Hostaform® C 9021 10/9005 is a nominal 9 melt flow rate acetal copolymer which is capable of being permanently marked by a laser. Parts molded from Hostaform® C 9021 10/9005 can be laser marked with barcodes, identification numbers, designs, 2-D symbology, etc.

Product information

Resin Identification	POM	ISO 1043
Part Marking Code	>POM<	ISO 11469

Rheological properties

Melt volume-flow rate	8 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	2.0 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.8 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	2850 MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	64 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	9 %	ISO 527-1/-2
Nominal strain at break	25 %	ISO 527-1/-2
Flexural modulus	2700 MPa	ISO 178
Tensile creep modulus, 1h	2500 MPa	ISO 899-1
Tensile creep modulus, 1000h	1300 MPa	ISO 899-1
Charpy impact strength, 23°C	180 ^[P] kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	160 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	5.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.37 ^[C]	

[P]: Partial Break

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	104 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	110 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	110 E-6/K	ISO 11359-1/-2
Thermal conductivity of melt	0.155 W/(m K)	ISO 22007-2
Effective thermal diffusivity, flow	4.85E-8 m ² /s	ISO 22007-4
Specific heat capacity of melt	2210 J/(kg K)	ISO 22007-4

Flammability

Burning Behav. at 1.5mm nom. thickn.	HB class	IEC 60695-11-10
Thickness tested	1.5 mm	IEC 60695-11-10
Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	3 mm	IEC 60695-11-10

HOSTAFORM® C 9021 10/9005

HOSTAFORM®

the use of a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,2 %

Processing

Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Postprocessing

Conditioning e.g. moisturizing is not necessary.

Pre-Drying

Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.

Storage

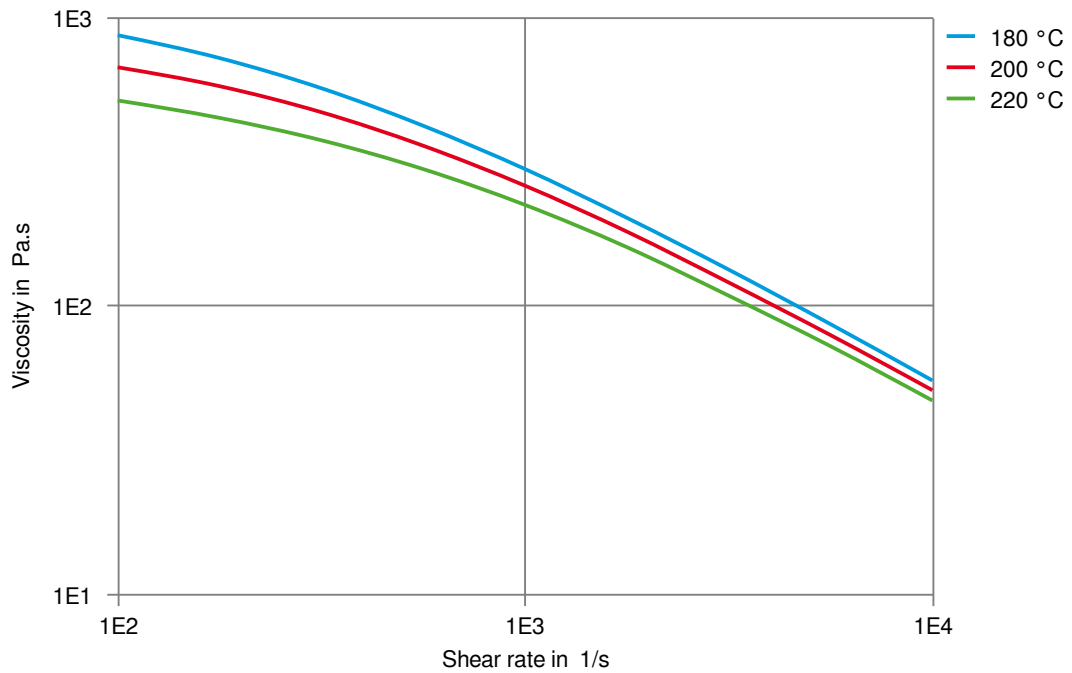
The product can then be stored in standard conditions until processed.

Processing Notes

HOSTAFORM® C 9021 10/9005

HOSTAFORM®

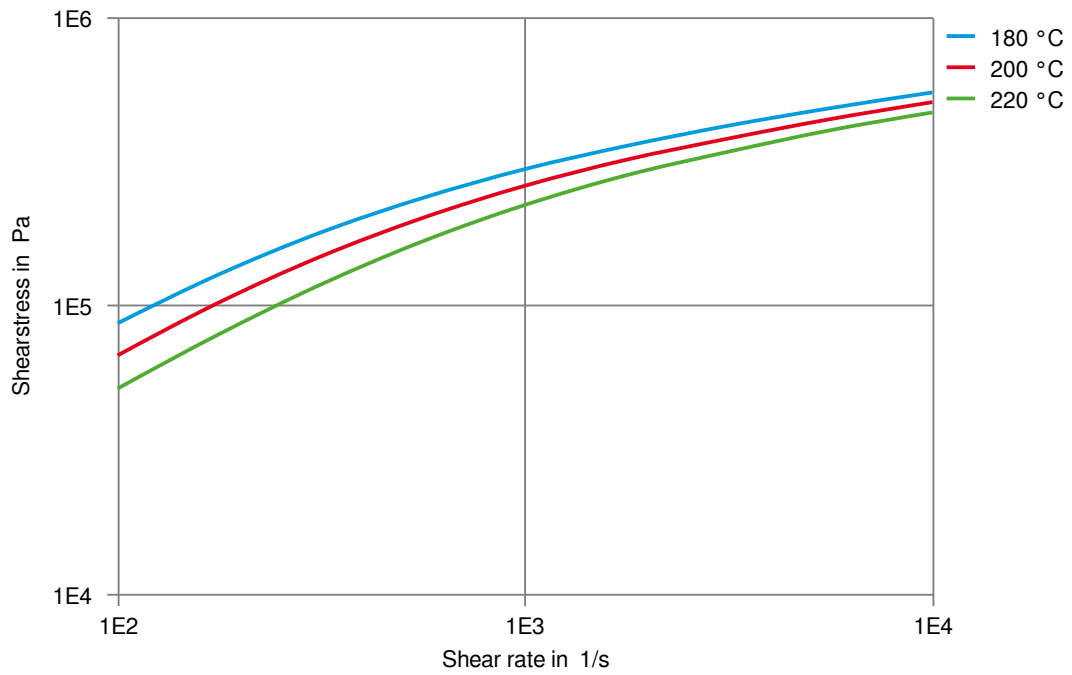
Viscosity-shear rate



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

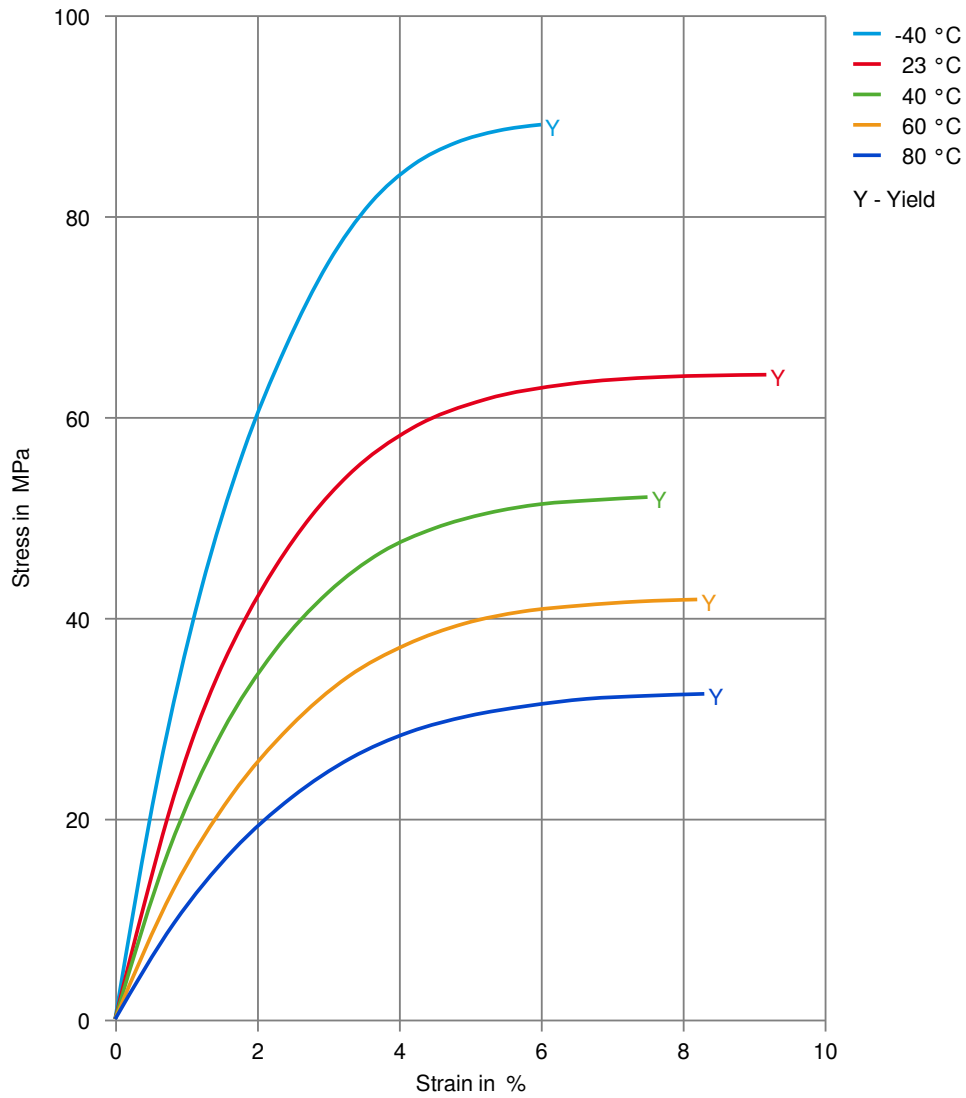
Shearstress-shear rate



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

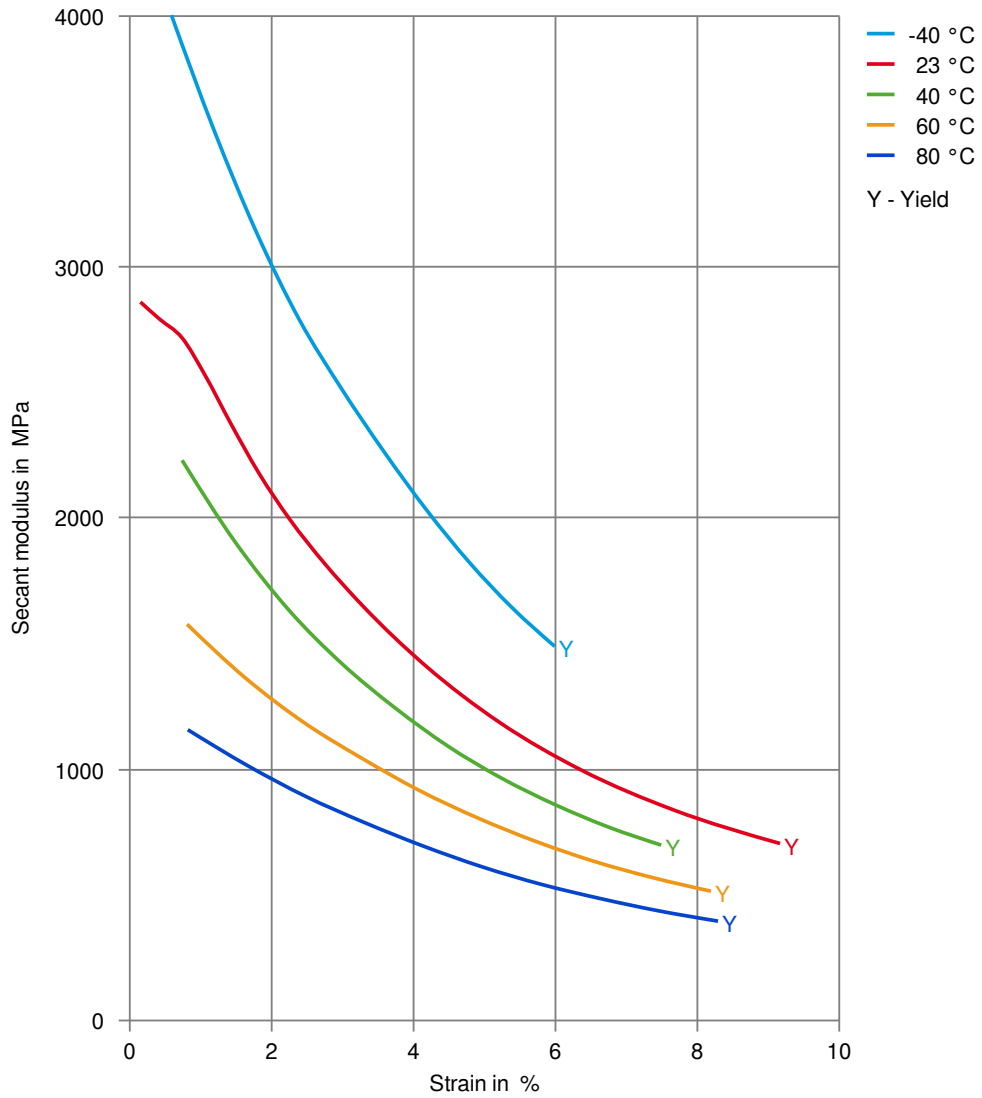
Stress-strain



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

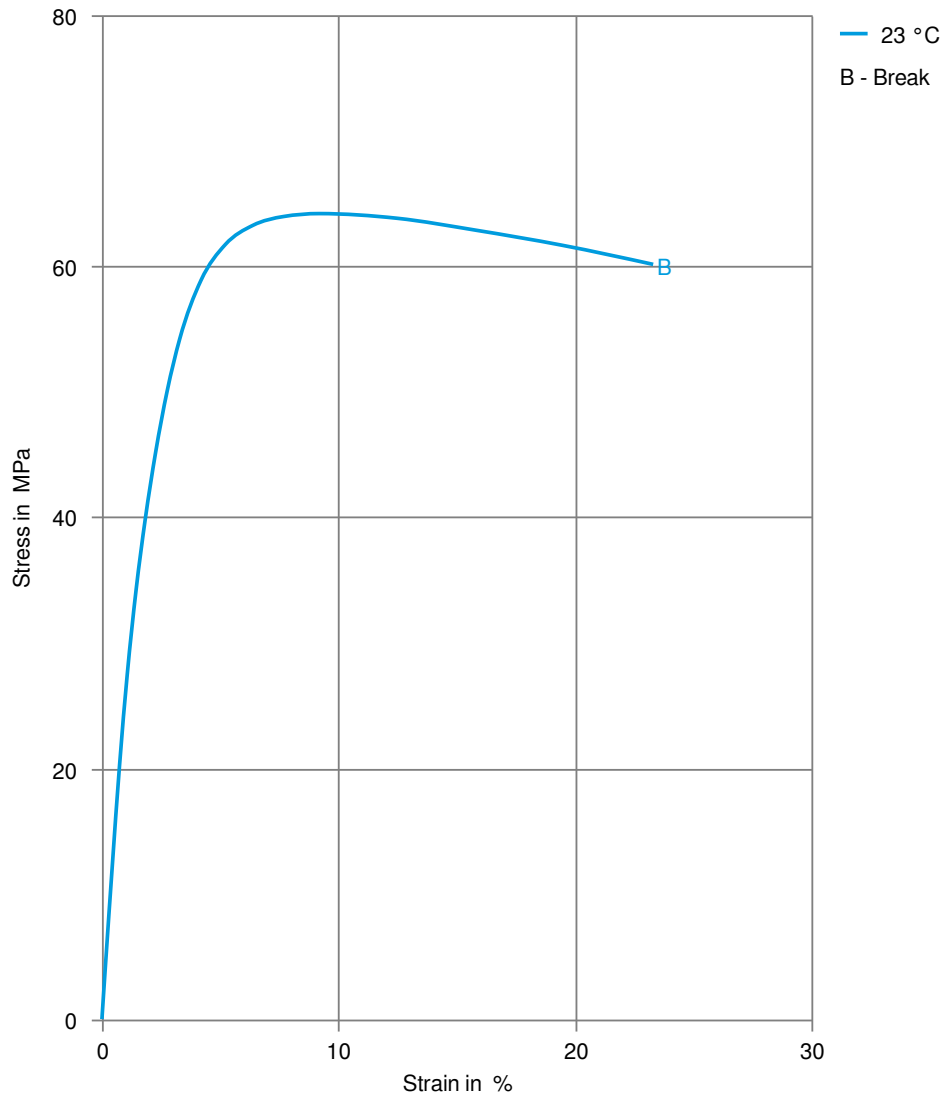
Secant modulus-strain



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

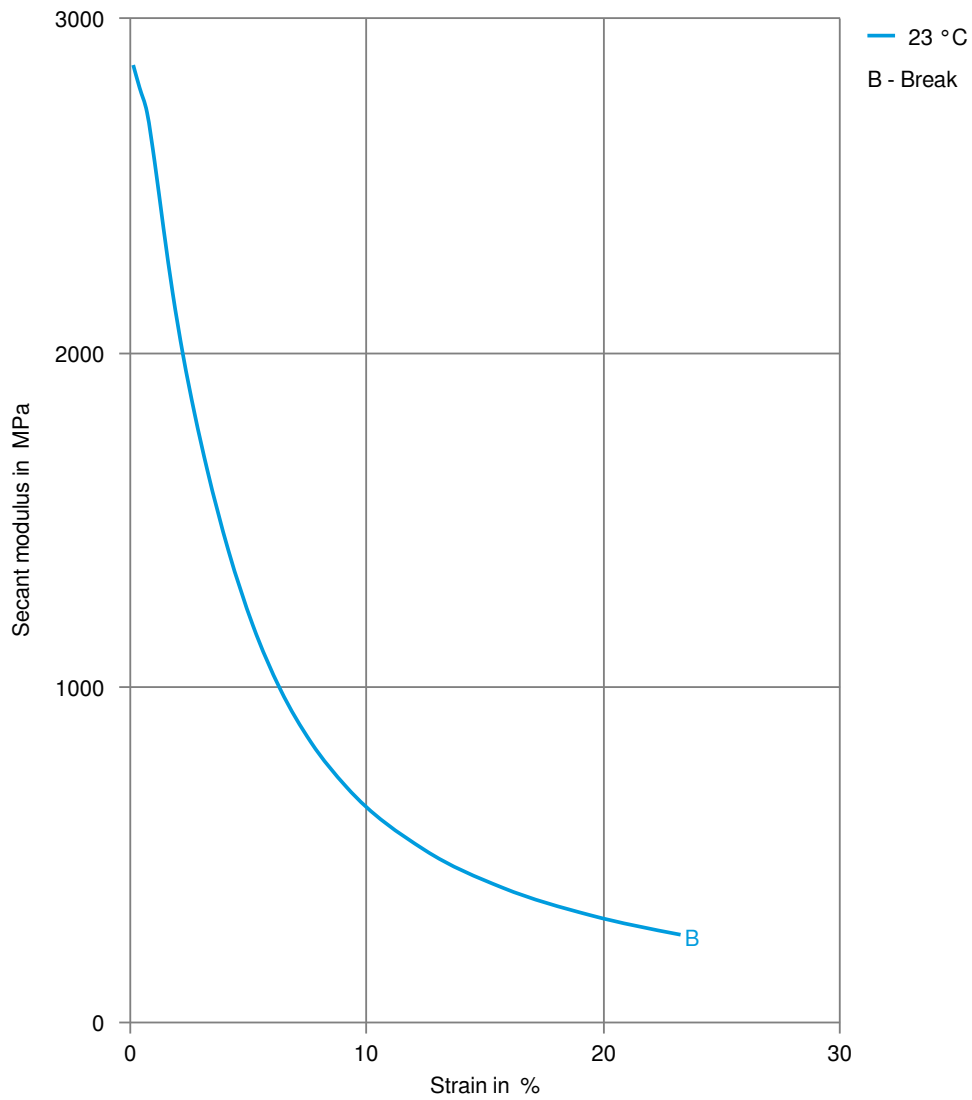
Stress-strain, 50mm/min



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

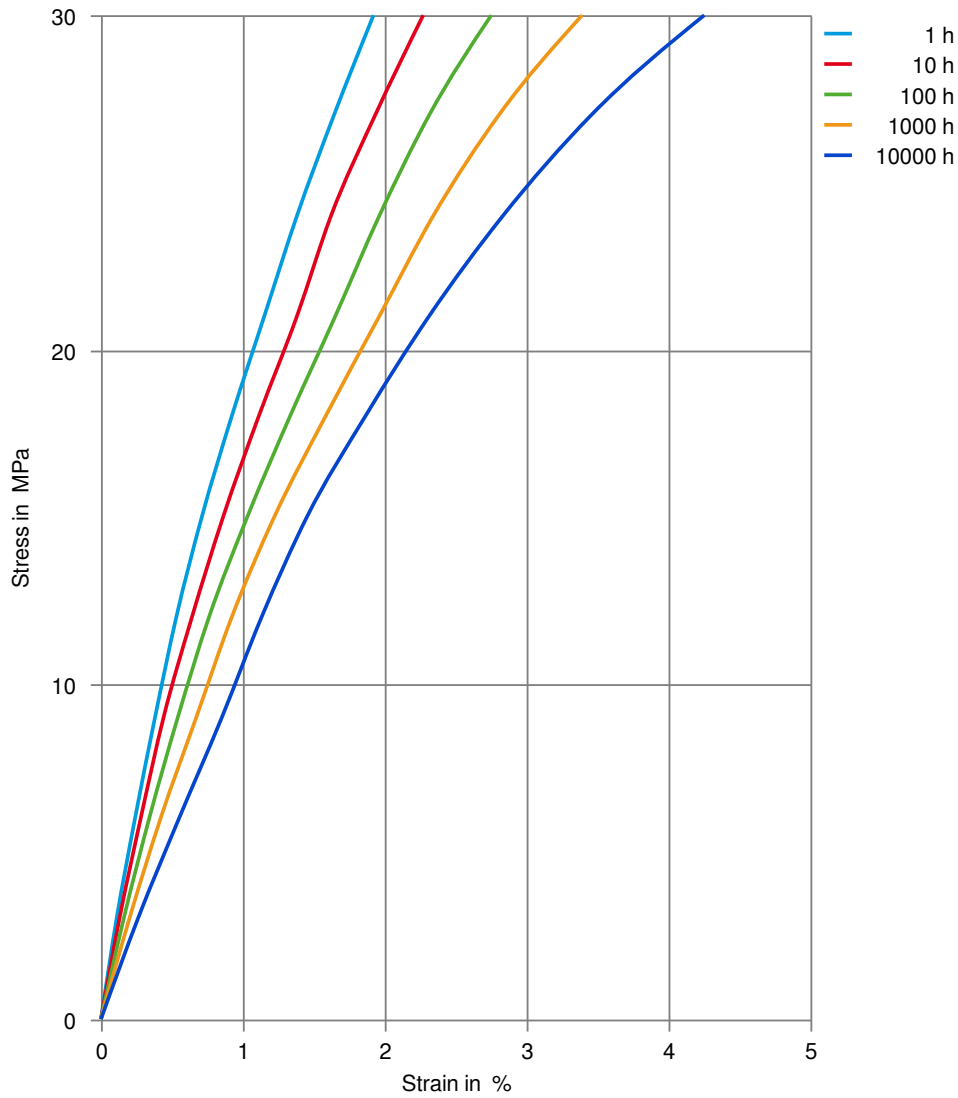
Secant modulus-strain, 50mm/min



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

Stress-strain (isochronous) 23°C



HOSTAFORM® C 9021 10/9005

HOSTAFORM®

Creep modulus-time 23°C

