

HOSTAFORM® C 9021 XAP® C

POM for Consumers and Cosmetics. Low Emissions, low Extractables, FDA approval

POM copolymer Medium flow injection molding grade with very low emissions and migrations; designed for consumer packaging. Emission according to VDA 275 < 2 mg/kg (natural grades), VDA 275 < 5 mg/kg (colors), Monomers and additives are listed in EU-Regulation (EU) 10/2011 FDA compliant according to 21 CFR 177.2470 FDA = Food and Drug Administration (USA)

Rheological properties

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

Typical mechanical properties

Tensile Modulus	2850 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	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	220 ^[P] kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	220 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6 kJ/m ²	ISO 179/1eA
Ball indentation hardness, H 358/30	144 MPa	ISO 2039-1

[P]: Partial Break

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	104 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	150 °C	ISO 306
Coeff. of linear therm. expansion, parallel	110 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110 E-6/K	ISO 11359-1/-2
Thermal conductivity of melt	0.155 W/(m K)	Internal
Eff. thermal diffusivity	4.85E-8 m ² /s	Internal
Spec. heat capacity of melt	2210 J/(kg K)	Internal

Electrical properties

Relative permittivity, 100Hz	4	IEC 62631-2-1
Relative permittivity, 1MHz	4	IEC 62631-2-1
Dissipation factor, 100Hz	20 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	50 E-4	IEC 62631-2-1



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Volume resistivity	1E12 Ohm.m	IEC 62631-3-1
Surface resistivity	1E14 Ohm	IEC 62631-3-2
Electric strength	35 kV/mm	IEC 60243-1
Comparative tracking index	PLC 0 PLC	UL 746A

Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.65 %	Sim. to ISO 62
Density	1410 kg/m³	ISO 1183
Density of melt	1200 kg/m³	Internal

Injection

Drying Temperature	100 - 120 °C	
Drying Time, Dehumidified Dryer	3 - 4 h	
Processing Moisture Content	0.15 %	
Screw tangential speed	0.2 - 0.21 m/s	
Max. mould temperature	80 - 120 °C	
Back pressure	4 MPa	
Injection speed	slow-medium	
Ejection temperature	140 °C	Internal

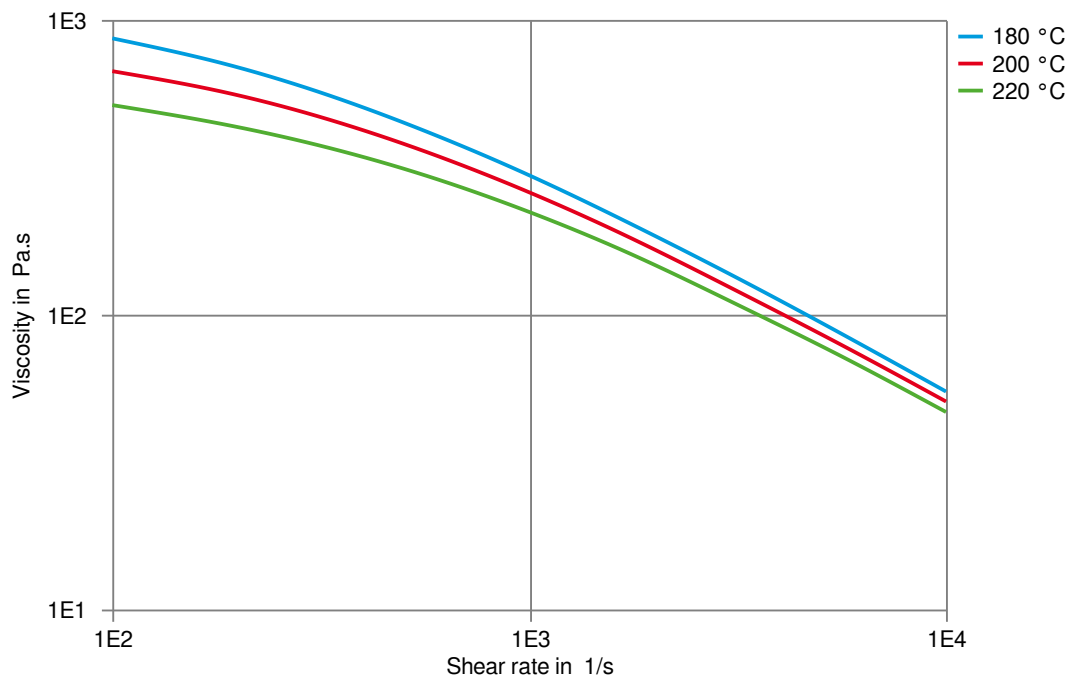
Characteristics

Additives	Release agent
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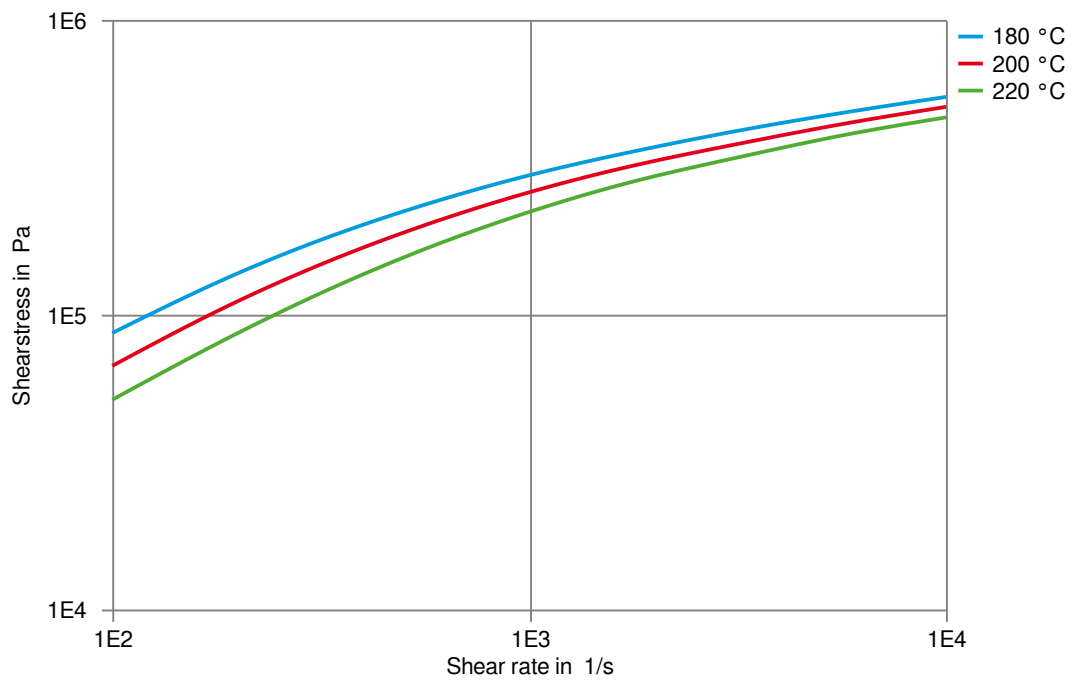
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Viscosity-shear rate



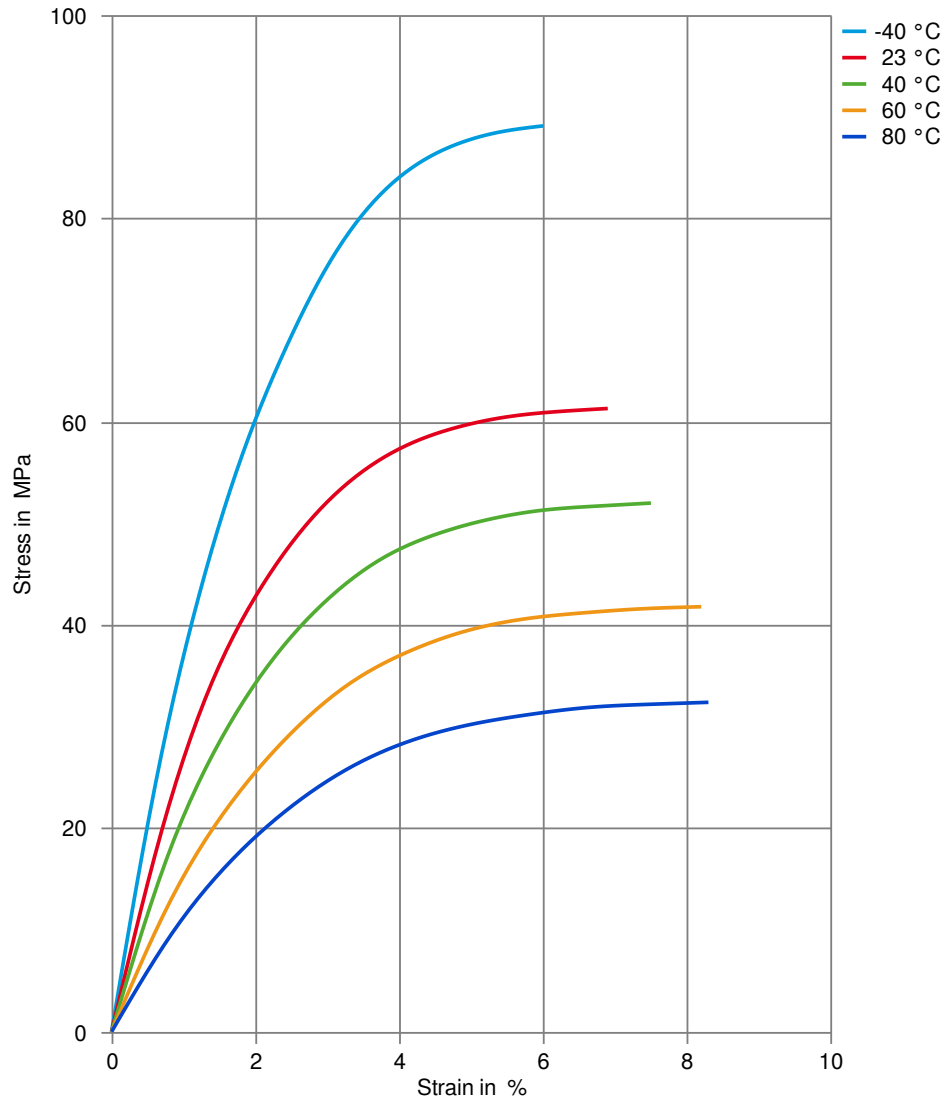
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Shearstress-shear rate



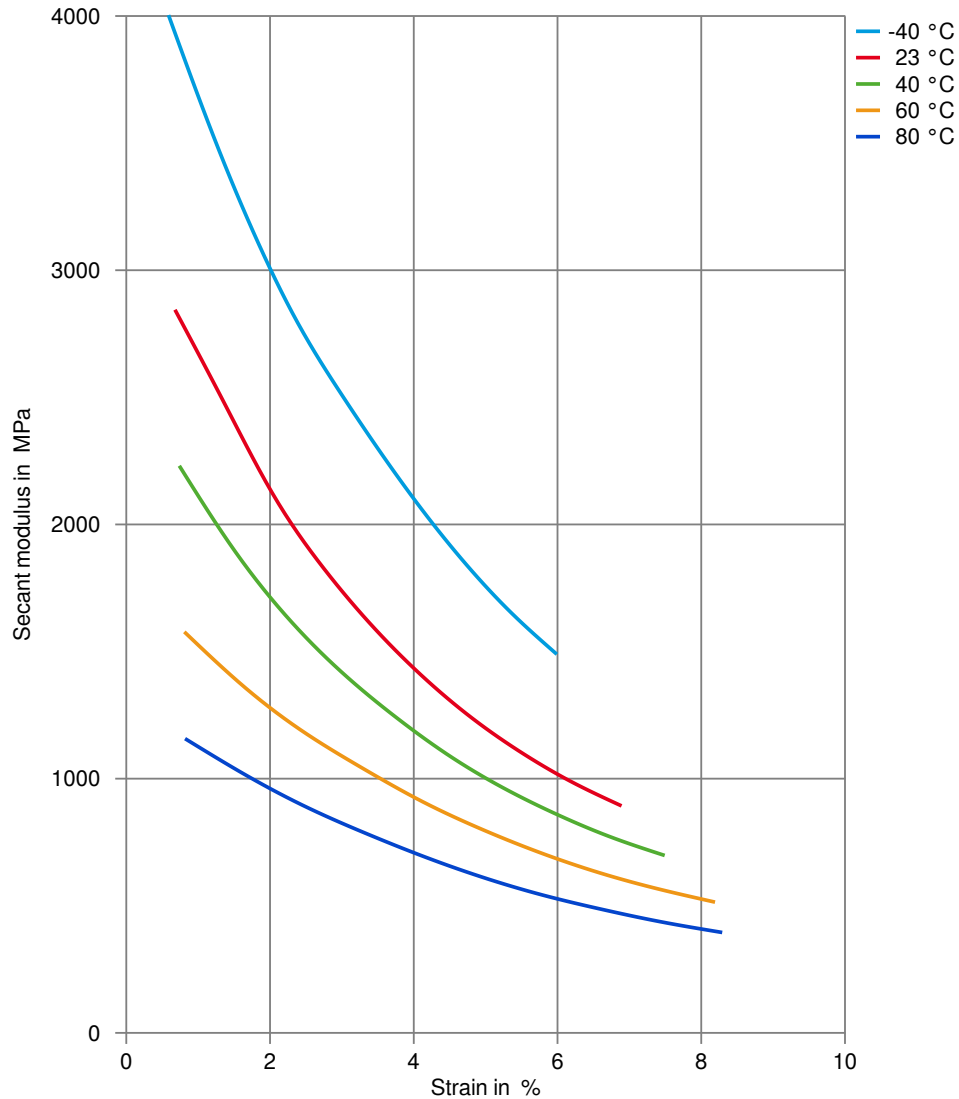
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Stress-strain



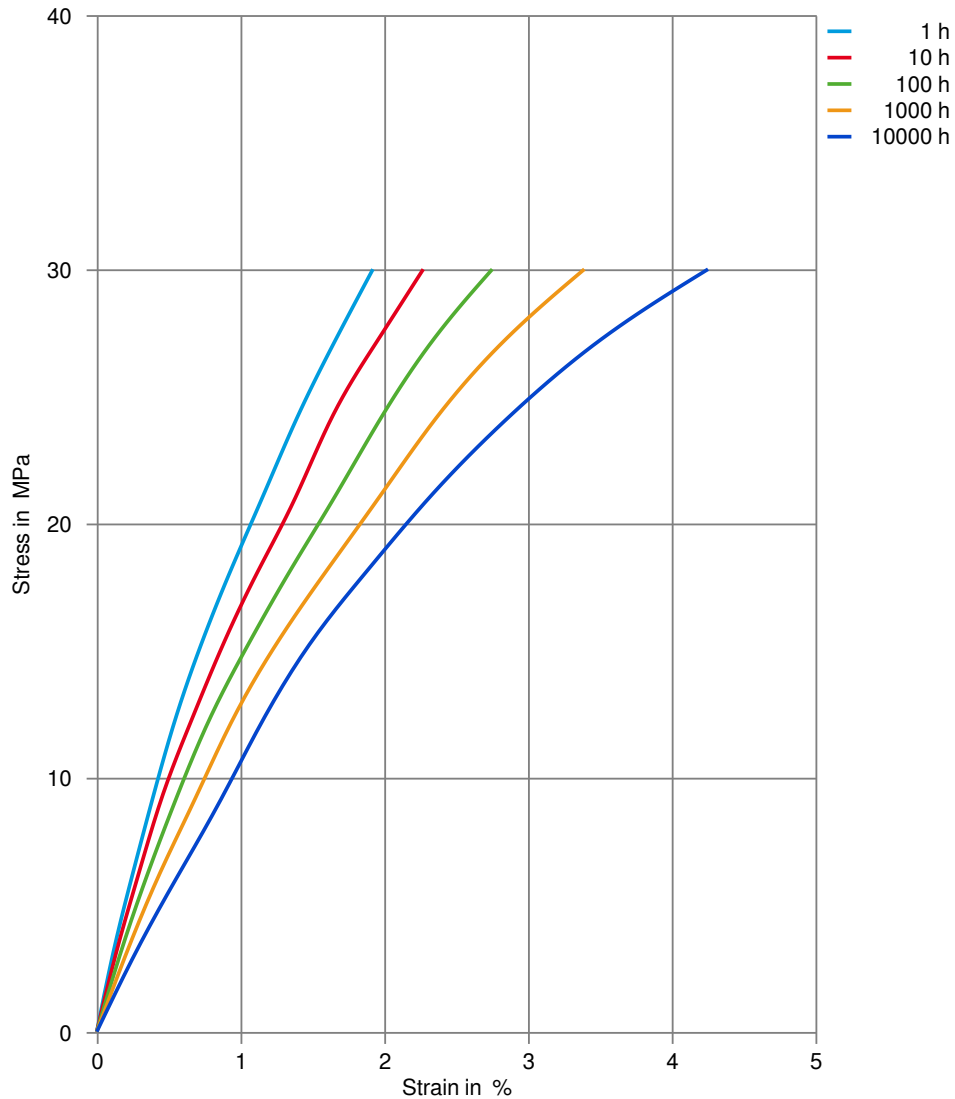
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Secant modulus-strain



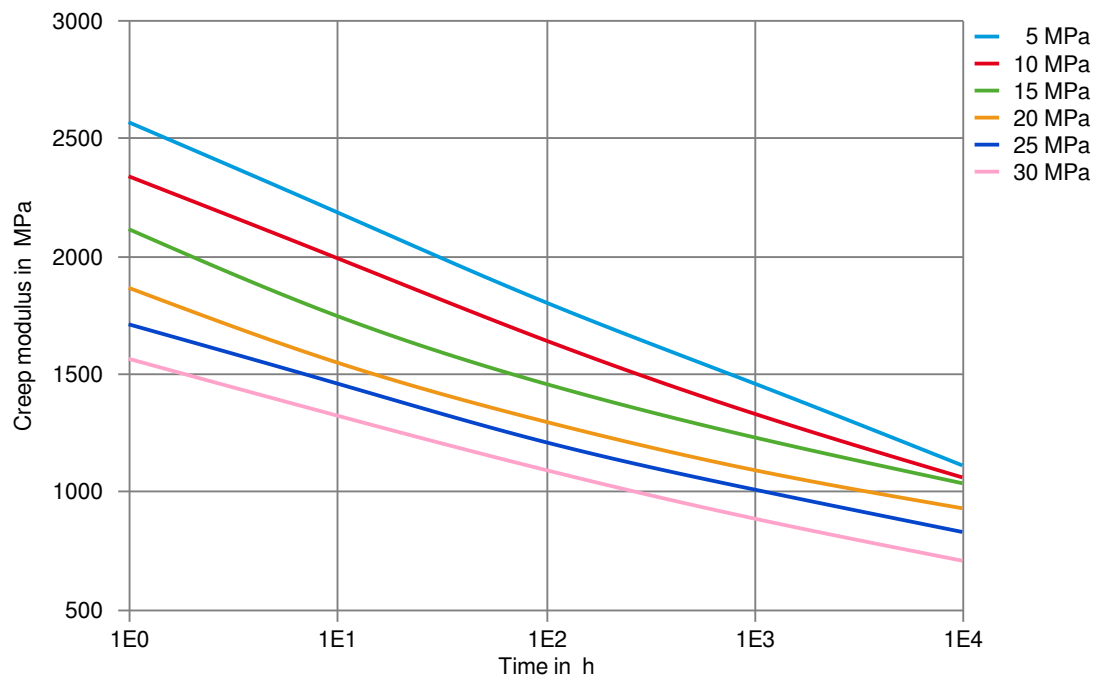
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Stress-strain (isochronous) 23°C



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Creep modulus-time 23°C



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Processing Texts

Pre-drying

It is normally not necessary to dry HOSTAFORM. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required. A circulating air drying cabinet can be used for this purpose if the granul

Longer pre-drying times/storage

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

