

HOSTAFORM® C 27021 LS colored

Injection molding grade with high flow
POM copolymer

Very easy flowing Injection molding type with high rigidity and hardness; with UV additives, mass colored

Burning rate ISO 3795 and FMVSS 302 < 75 mm/min for a thickness more than 1 mm.

FMVSS = Federal Motor Vehicle Safety Standard (USA)

Rheological properties

Melt volume-flow rate	24 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage range, parallel	1.9 %	ISO 294-4, 2577
Moulding shrinkage range, normal	1.8 %	ISO 294-4, 2577

Typical mechanical properties

Tensile Modulus	2900 MPa	ISO 527-1/-2
Yield stress, 50mm/min	65 MPa	ISO 527-1/-2
Yield strain, 50mm/min	7.5 %	ISO 527-1/-2
Nominal strain at break	17 %	ISO 527-1/-2
Flexural Modulus	2800 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	170 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	170 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	5.5 kJ/m ²	ISO 179/1eA
Ball indentation hardness, H 358/30	147 MPa	ISO 2039-1

Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	106 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	151 °C	ISO 306
Coeff. of linear therm. expansion, parallel	110 E-6/K	ISO 11359-1/-2
Thermal conductivity of melt	0.155 W/(m K)	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	25 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	50 E-4	IEC 62631-2-1
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

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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

Additional information

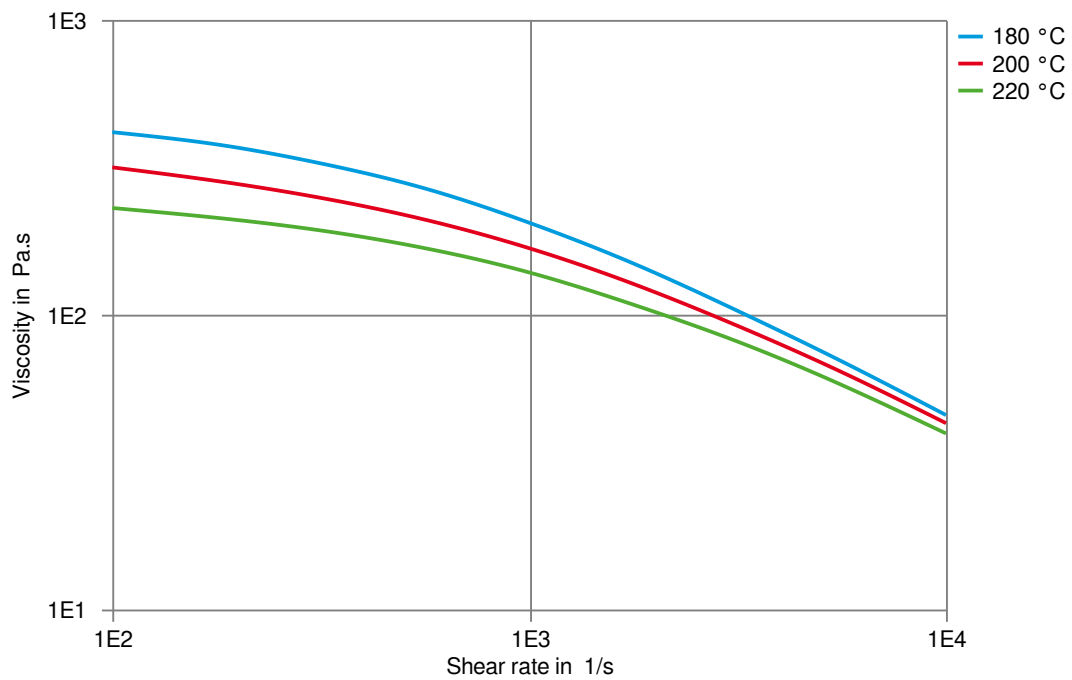
Injection molding

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



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Viscosity-shear rate

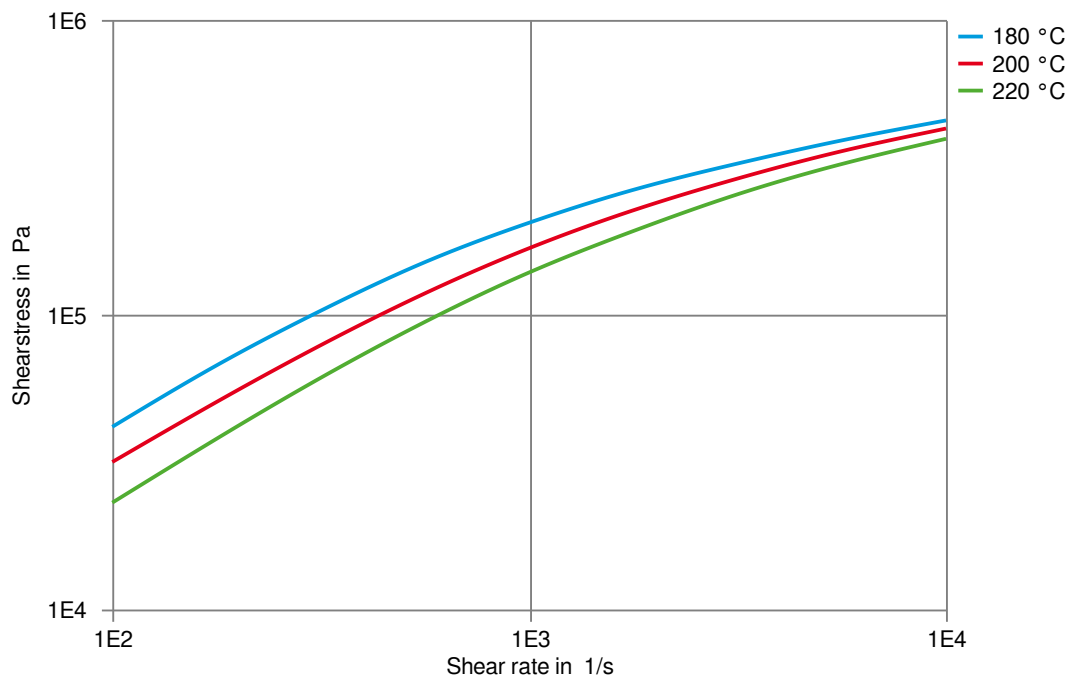


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Shearstress-shear rate

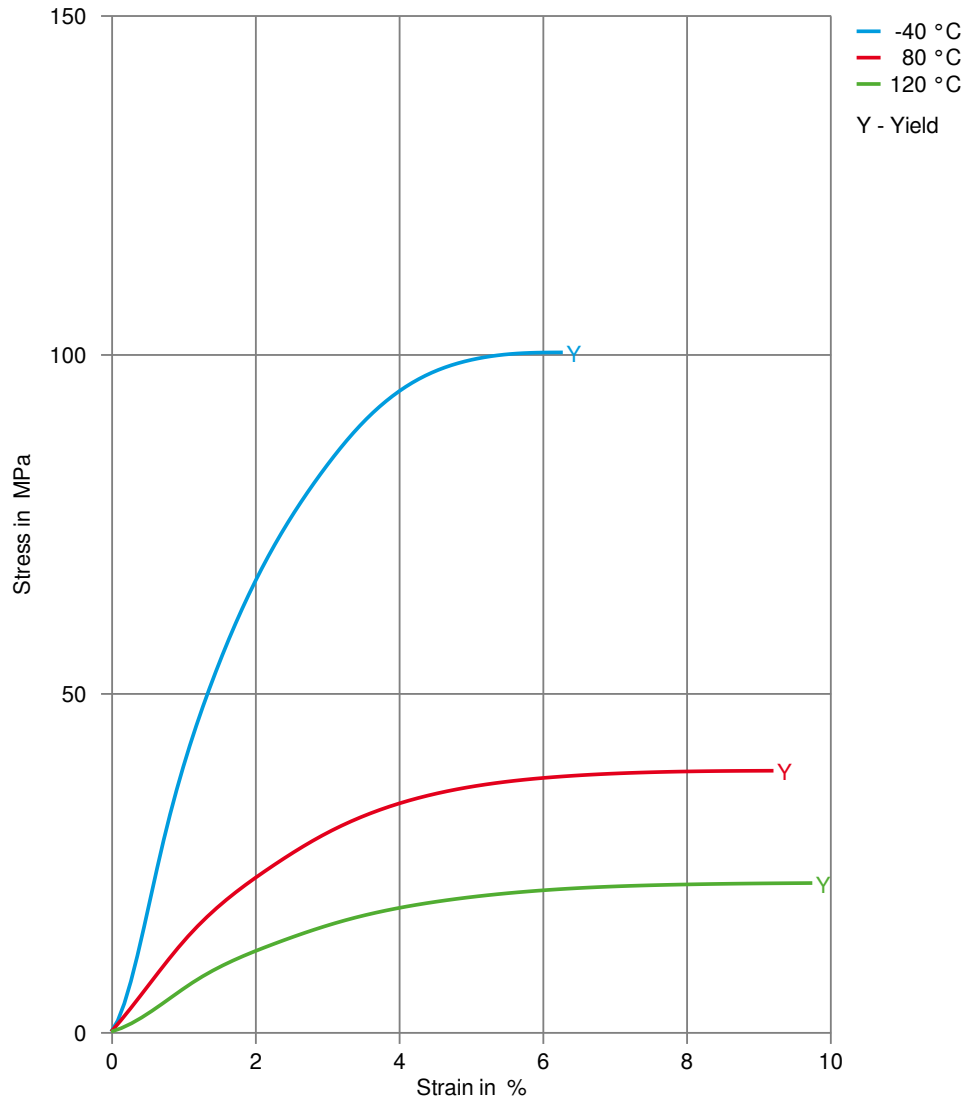


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Stress-strain

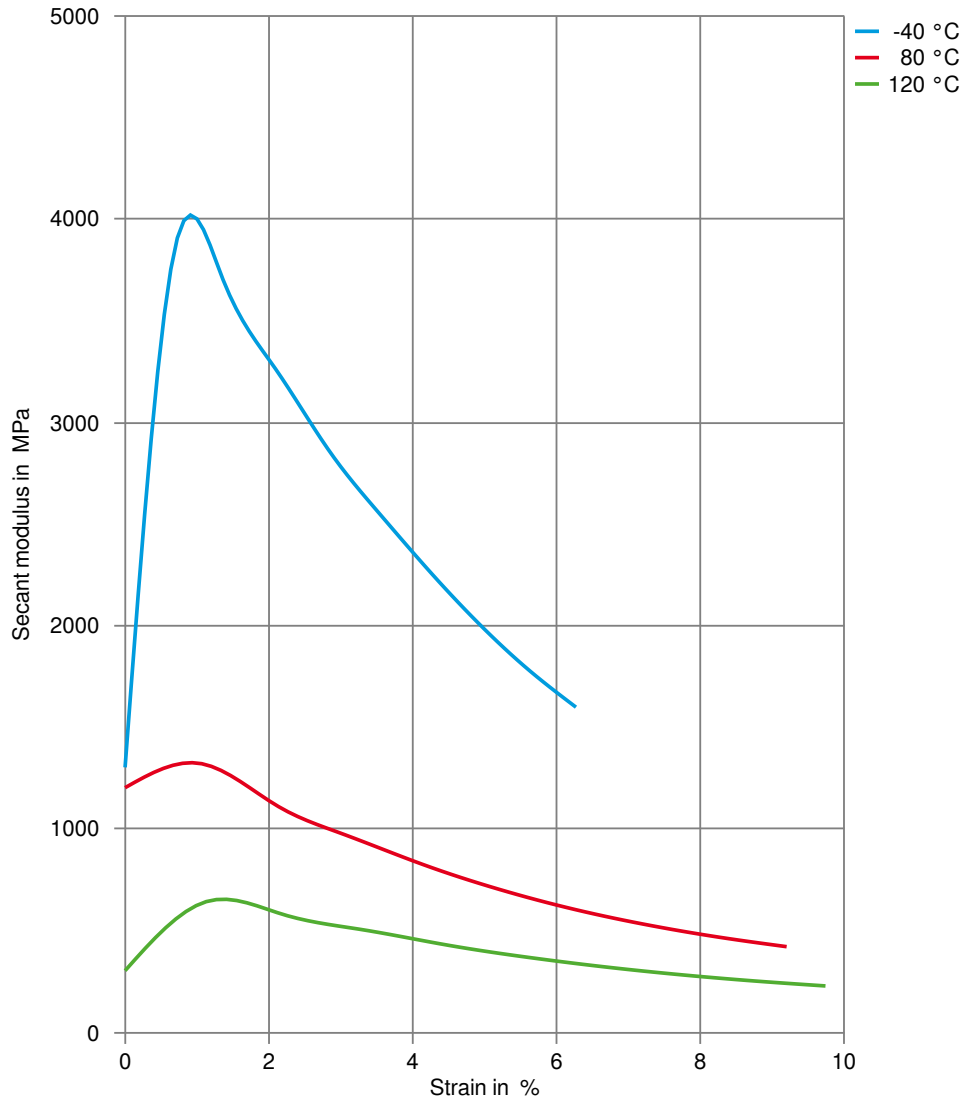


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Secant modulus-strain



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Processing Texts

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.
Longer pre-drying times/storage	The product can then be stored in standard conditions until processed.
Injection molding	Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.
Injection molding Preprocessing	General drying is not necessary due to low moisture absorption of the resin. In case of bad storage conditions (water contact or condensed water) 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 %
Injection molding Postprocessing	Conditioning e.g. moisturizing is not necessary.

Other Approvals

Other Approvals	OEM	Specification	Additional Information
	Ford	WSK-M4D840-A3	100% color match
	Stellantis - PSA Group	DT00102.AS POM - 002	

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