Celanese
The chemistry inside innovation™

HOSTAFORM® C 9021 10/1570

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Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GCL, 03-002 POM copolymer Medium viscosity injection molding grade; UV-stabilized with carbon black; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. UL-registration for a thickness more than 1.5 mm as UL 94 HB, temperature index UL 746 B electrical 110 °C, mechanical 90 °C. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: exterior applications. UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

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	3000	MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	64	MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	8	%	ISO 527-1/-2
Nominal strain at break	25	%	ISO 527-1/-2
Tensile creep modulus, 1h	2500	MPa	ISO 899-1
Tensile creep modulus, 1000h	1400	MPa	ISO 899-1
Charpy impact strength, 23°C	110	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	110	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
Poisson's ratio	0.37[C]		

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	167	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	105	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	110	E-6/K	ISO 11359-1/-2

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
UL recognition	yes		UL 94
FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	55.2	mm/min	ISO 3795 (FMVSS 302)

HOSTAFORM® C 9021 10/1570

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Electrical properties

Volume resistivity	1E12	Ohm.m	IEC 62631-3-1
Surface resistivity	1E14	Ohm	IEC 62631-3-2
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	300		IEC 60112

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	1420	kg/m^3	ISO 1183

Injection

Drying Recommended	no	
Drying Temperature	100	°C
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	200	°C
Min. melt temperature	190	°C
Max. melt temperature	210	°C
Screw tangential speed	≤0.3	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	80	°C
Max. mould temperature	120	°C
Hold pressure range	60 - 120	MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent
Special characteristics	Light stabilised or stable to light, U.V. stabilised or stable to weather

Additional information

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 %

Processing

Standard injection moulding machines with three phase (15 to 25 D)

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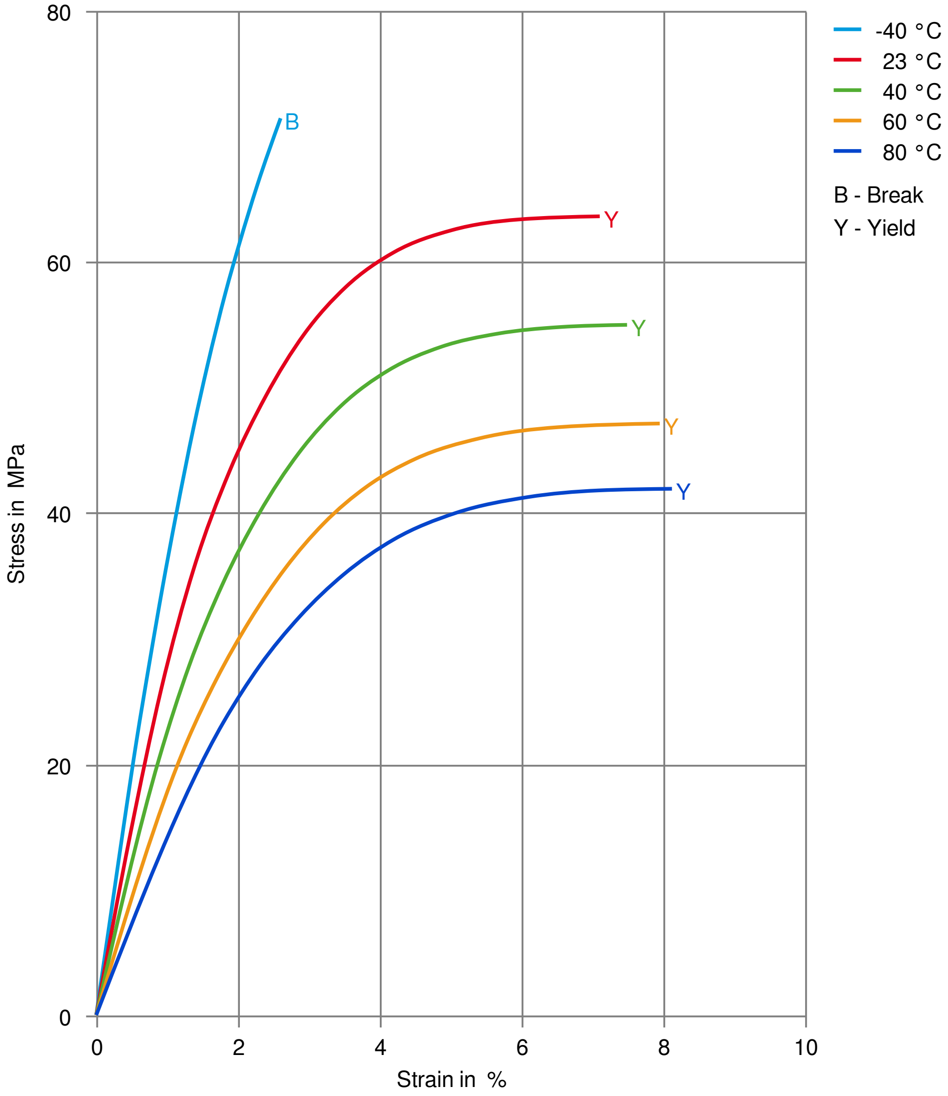
plasticating screws will fit.

Postprocessing

Conditioning e.g. moisturizing is not necessary.

Stress-strain



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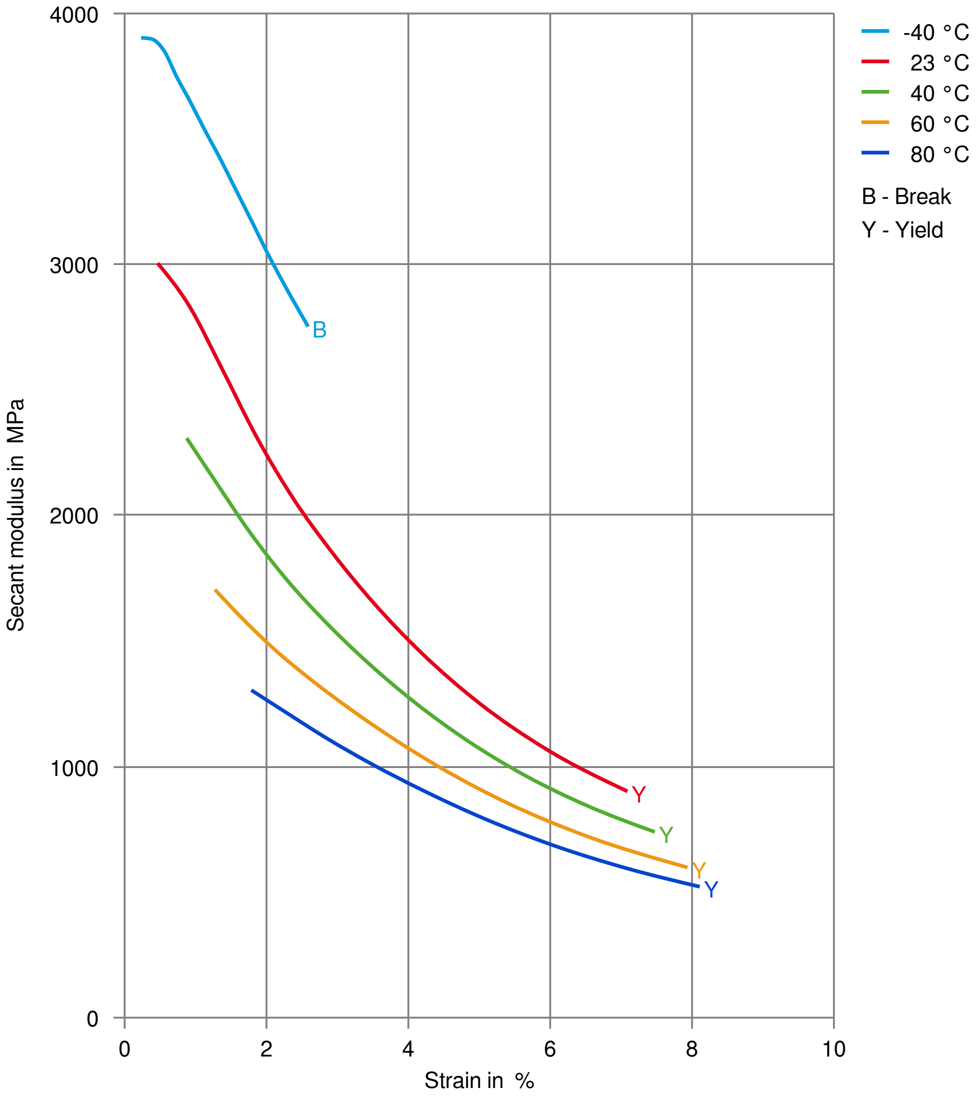
Secant modulus-strain



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Stress-strain, 50mm/min