Celanese
The chemistry inside innovation™

HOSTAFORM® C 27021 GV3/30

Injection molding grade with high flow; with 30 % glass spheres reinforced
Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNR, 05-002, GB30
POM copolymer With 30 % glass spheres reinforced, very easy flowing injection molding type; low-warpage; high resistance to thermal and oxidative degradation. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: low-warpage and dimensionally stable molded parts with higher rigidity and hardness. FMVSS = Federal Motor Vehicle Safety Standard (USA)

Product information

Part Marking Code	POM		ISO 11469

Rheological properties

Melt volume-flow rate	16	cm^3/10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	

Typical mechanical properties

Tensile Modulus	3800	MPa	ISO 527-1/-2
Yield stress, 50mm/min	38	MPa	ISO 527-1/-2
Yield strain, 50mm/min	6	%	ISO 527-1/-2
Nominal strain at break	12	%	ISO 527-1/-2
Flexural Modulus	3500	MPa	ISO 178
Tensile creep modulus, 1h	3300	MPa	ISO 899-1
Tensile creep modulus, 1000h	2100	MPa	ISO 899-1
Charpy impact strength, 23°C	30	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	30	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	2.5	kJ/m^2	ISO 179/1eA
Charpy notched impact strength, -30°C	3	kJ/m^2	ISO 179/1eA
Ball indentation hardness, H 358/30	167	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	112	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	151	°C	ISO 306
Coeff. of linear therm. expansion, parallel	80	E-6/K	ISO 11359-1/-2

Electrical properties

Relative permittivity, 100Hz	5		IEC 62631-2-1
Relative permittivity, 1MHz	4.5		IEC 62631-2-1
Dissipation factor, 100Hz	300	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	80	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	40	kV/mm	IEC 60243-1

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Comparative tracking index	PLC 0	PLC	UL 746A

Other properties

Humidity absorption, 2mm	0.12	%	Sim. to ISO 62
Water absorption, 2mm	0.9	%	Sim. to ISO 62
Density	1590	kg/m³	ISO 1183

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	2	MPa
Injection speed	slow	

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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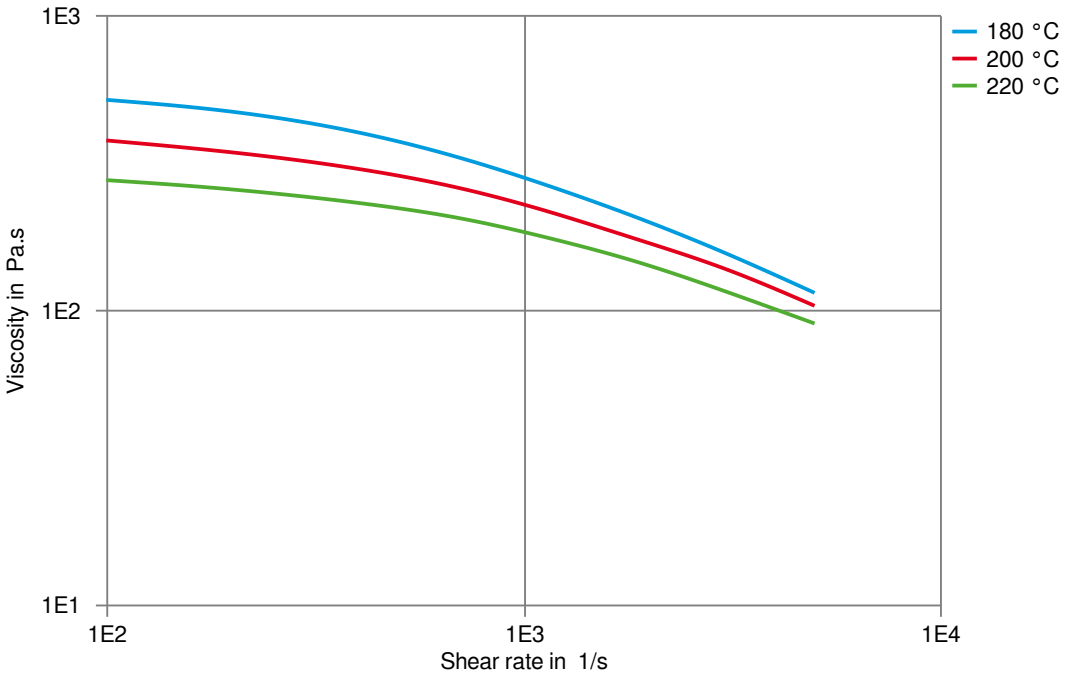
Viscosity-shear rate



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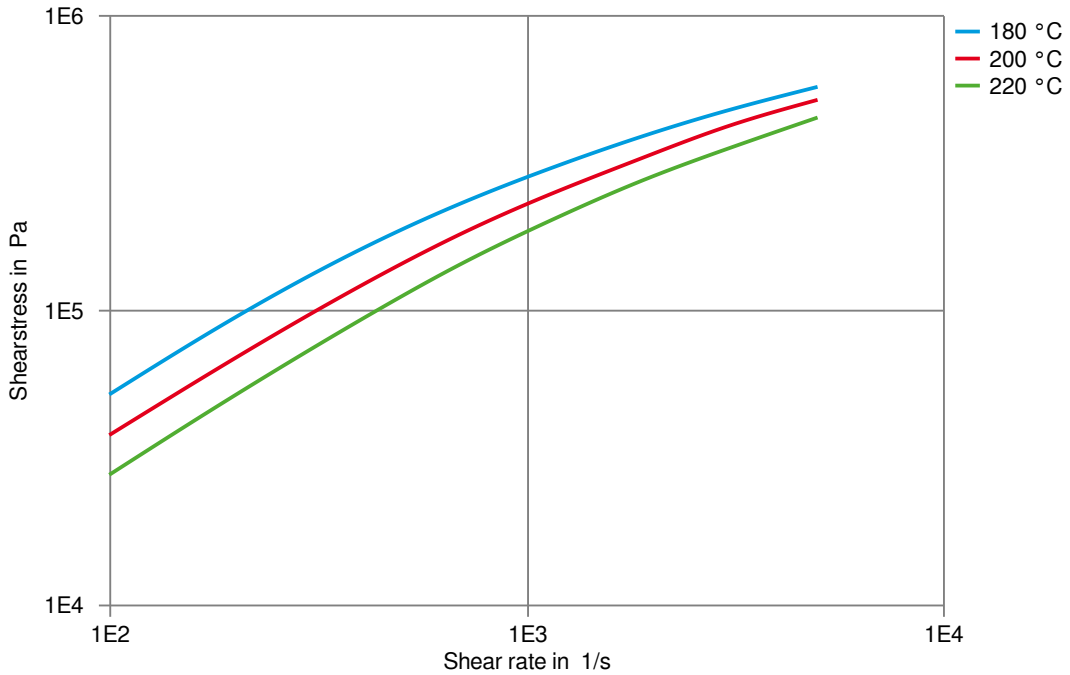
Shearstress-shear rate



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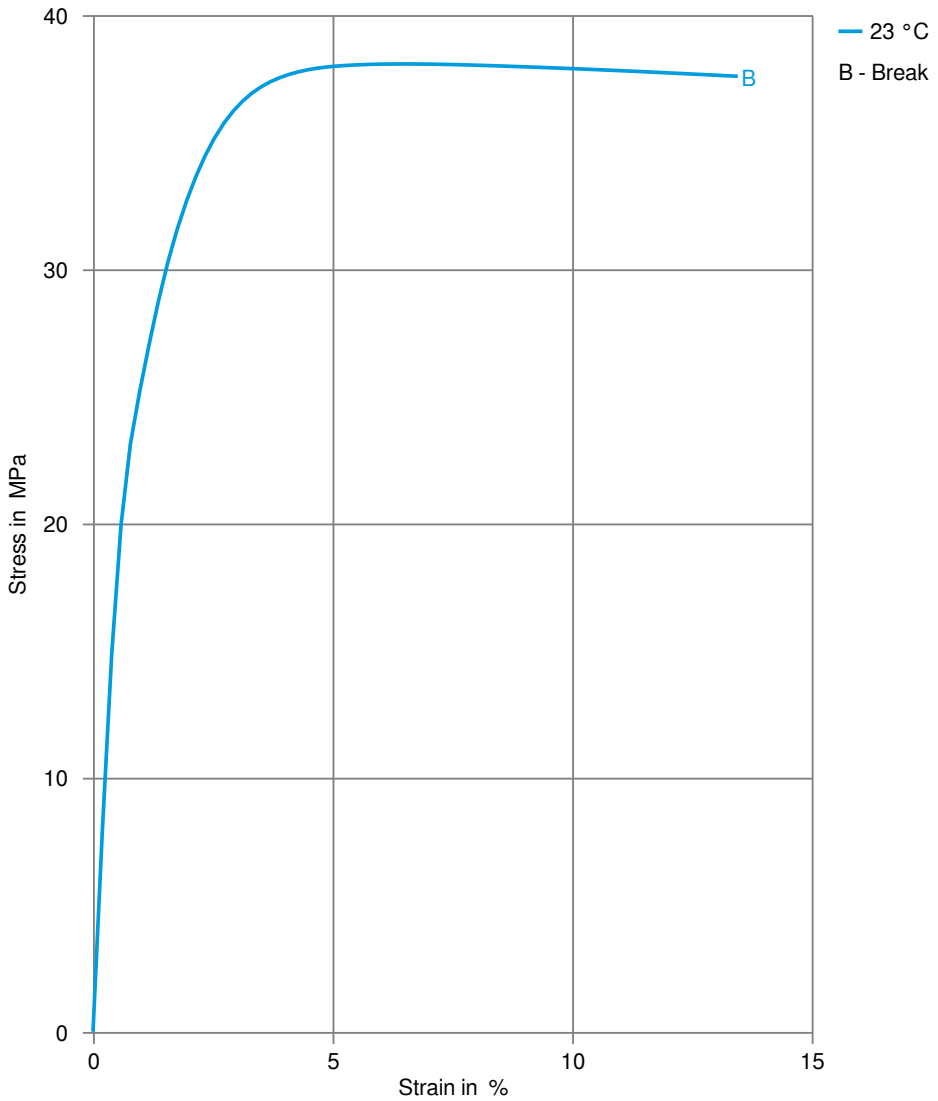
Stress-strain



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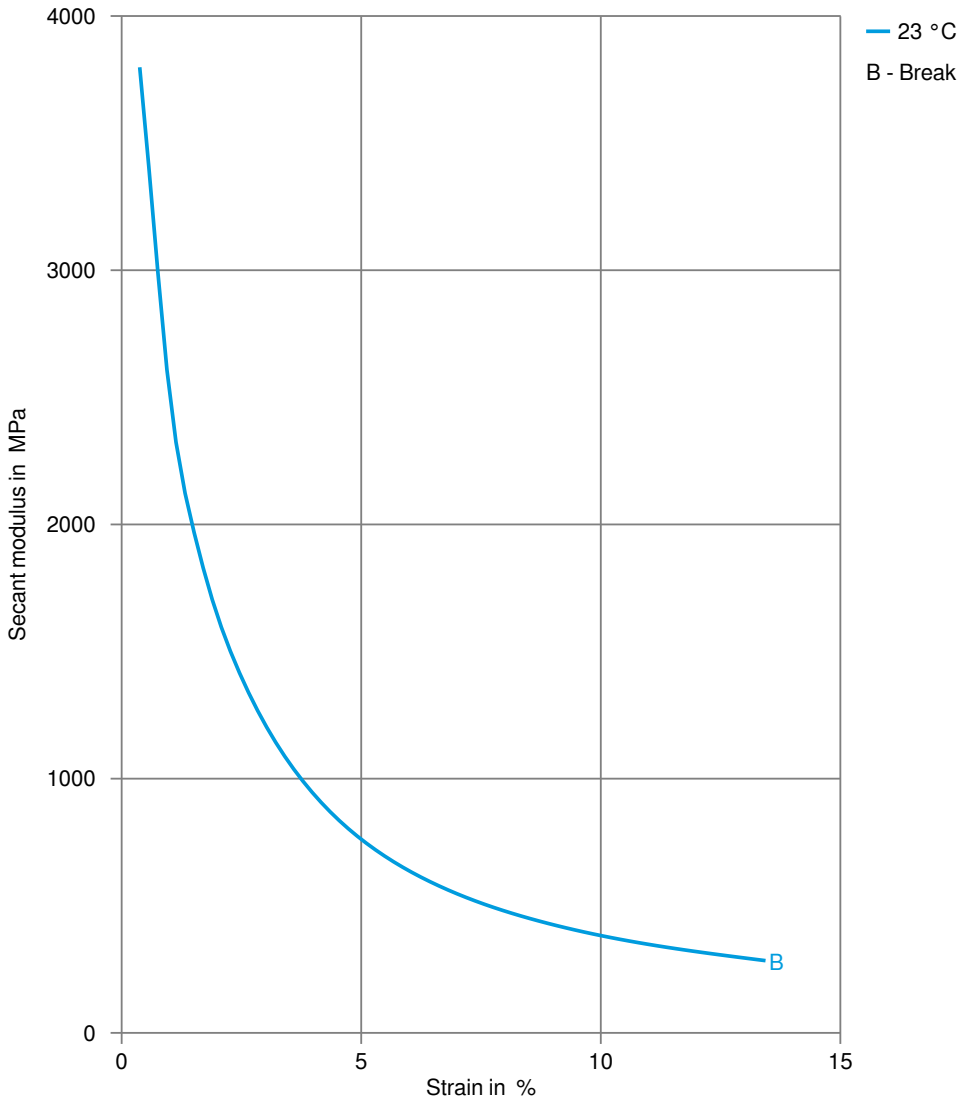
Secant modulus-strain



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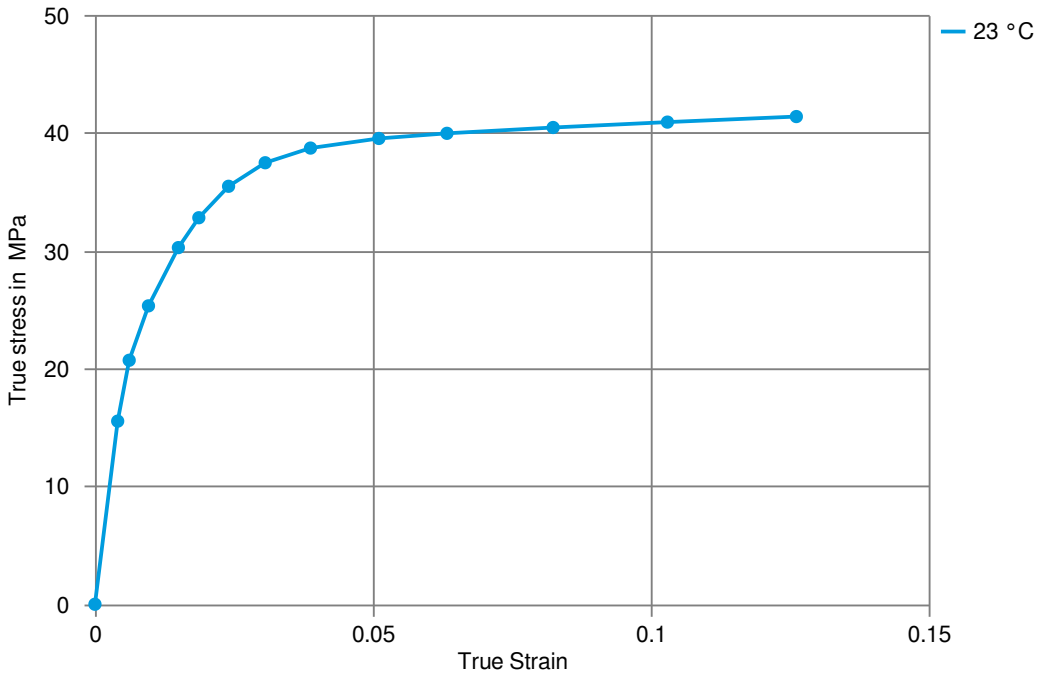
True stress-strain



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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
Continental	TST N 055 54.16