Celanese
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HOSTAFORM® C 9021 M XAP®2

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POM copolymer
Injection molding type, modified with molybdenum disulphide; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation.
Reduced emission grade. Emissions according to VDA 275 < 5 mg/kg
Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm.
Ranges of applications: For sliding combinations with high surface pressure and low sliding speed, only slight tendency to stick-slip.
Preliminary Datasheet

Product information

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

Rheological properties

Melt volume-flow rate	8.5	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	2650	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	20	%	ISO 527-1/-2
Flexural modulus	2600	MPa	ISO 178
Flexural strength	65	MPa	ISO 178
Tensile creep modulus, 1h	2300	MPa	ISO 899-1
Tensile creep modulus, 1000h	1100	MPa	ISO 899-1
Charpy impact strength, 23°C	120	kJ/m^2	ISO 179/1eU
Charpy impact strength, -30°C	120	kJ/m^2	ISO 179/1eU
Charpy notched impact strength, 23°C	6	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	140	MPa	ISO 2039-1
Poisson's ratio	0.38[C]		

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	100	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	110	E-6/K	ISO 11359-1/-2

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Electrical properties

Relative permittivity, 100Hz	4.2		IEC 62631-2-1
Relative permittivity, 1MHz	4.2		IEC 62631-2-1
Dissipation factor, 100Hz	25	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	35	kV/mm	IEC 60243-1
Comparative tracking index	600		IEC 60112

Physical/Other properties

Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.75	%	Sim. to ISO 62
Density	1420	kg/m³	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
Back pressure	2	MPa

Characteristics

Processing	Injection Moulding, Other Extrusion
Delivery form	Pellets
Special characteristics	Low wear / Low friction, Low emissions

Additional information

Processing Notes

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.

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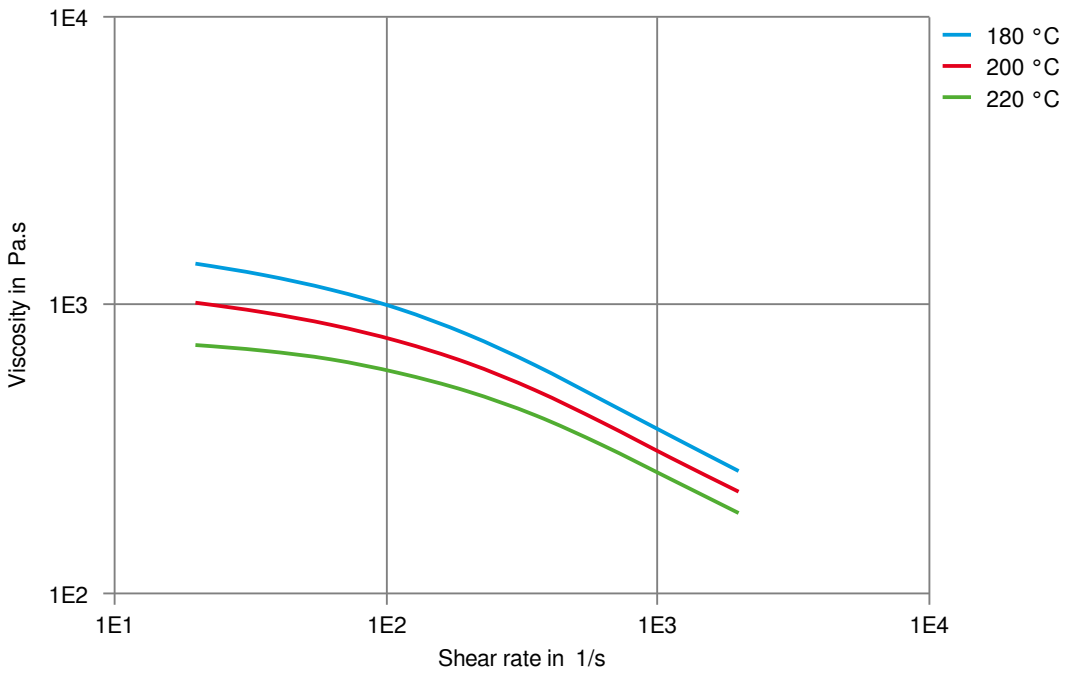
Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
BMW	GS97014	2014-04
Mercedes-Benz	DBL5404	BQF

Viscosity-shear rate



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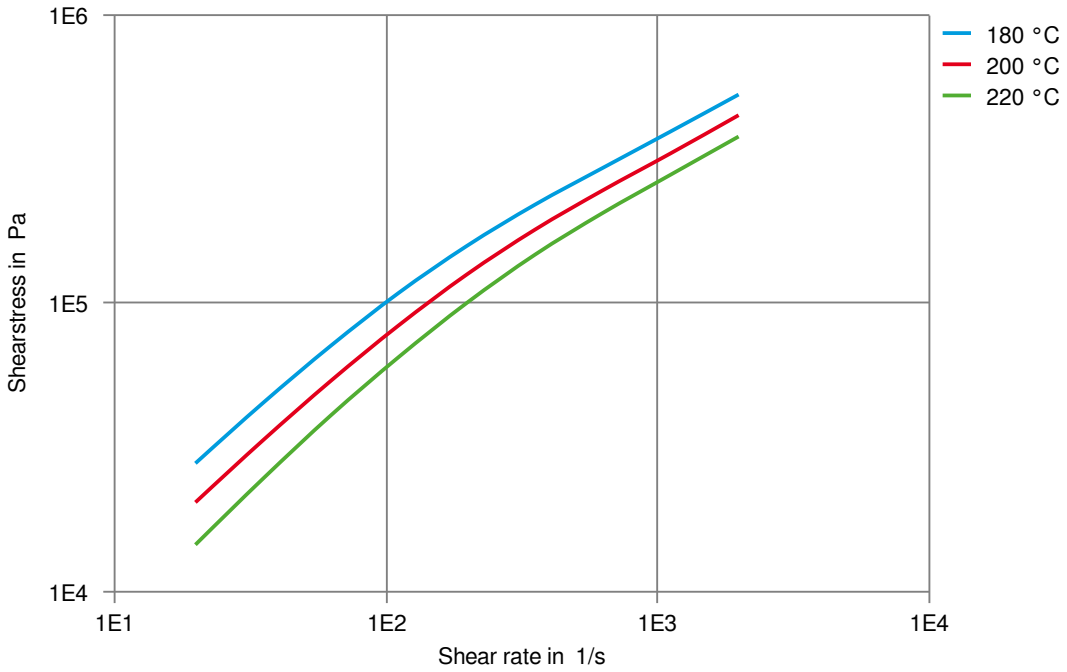
Shearstress-shear rate



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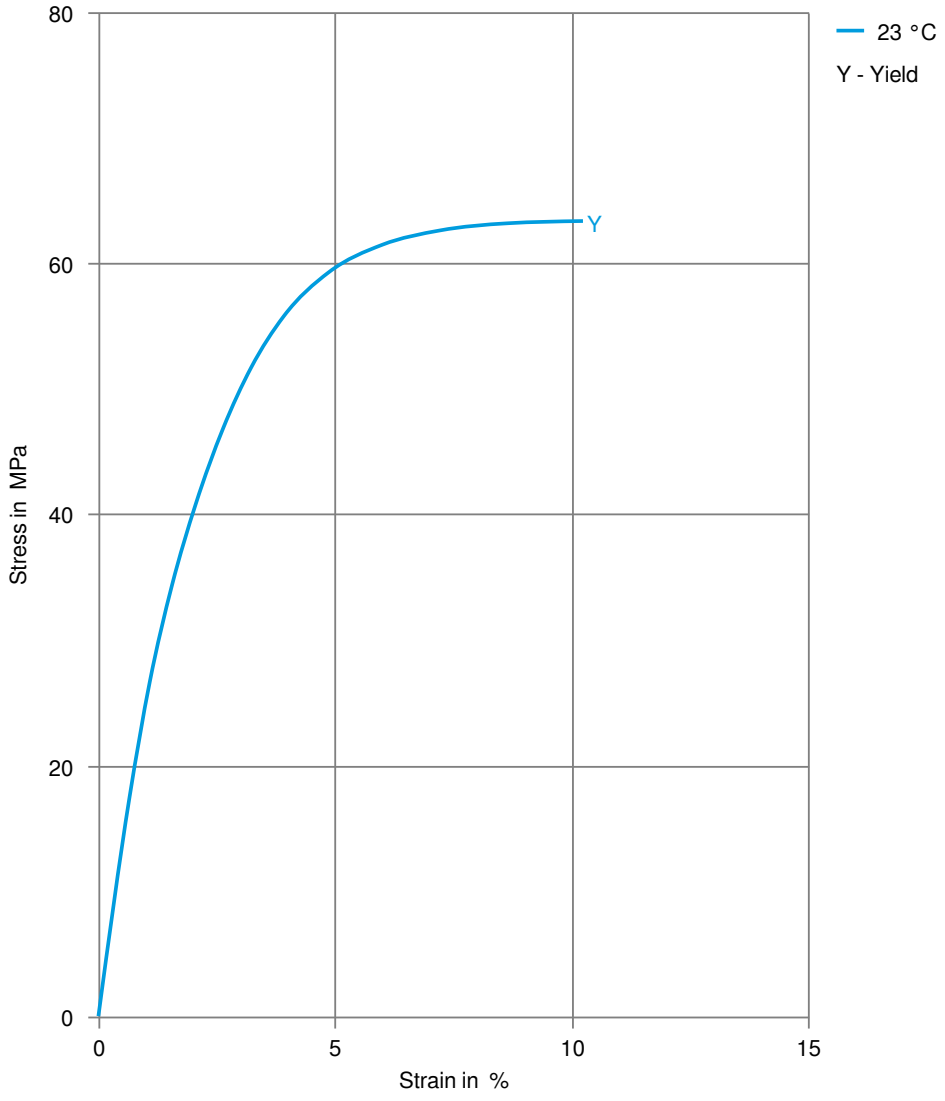
Stress-strain



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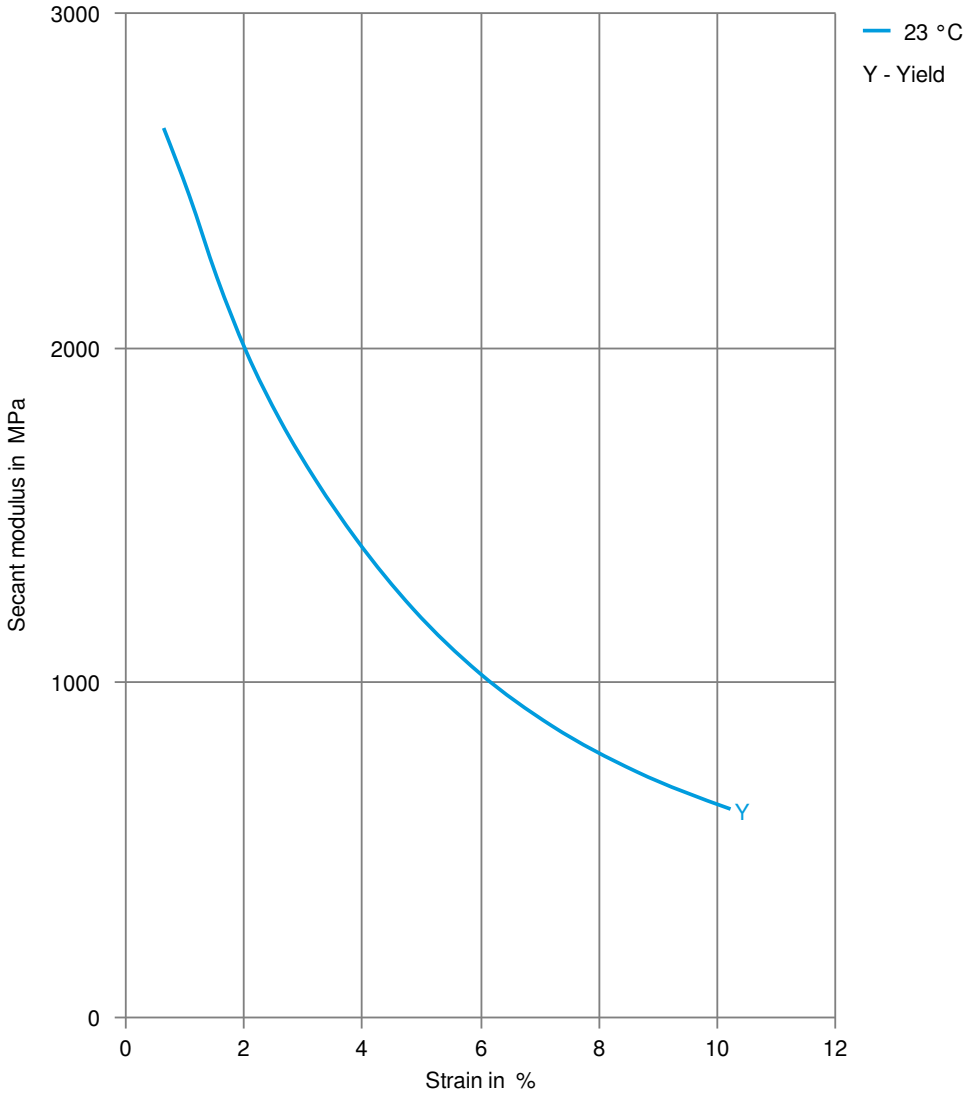
Secant modulus-strain



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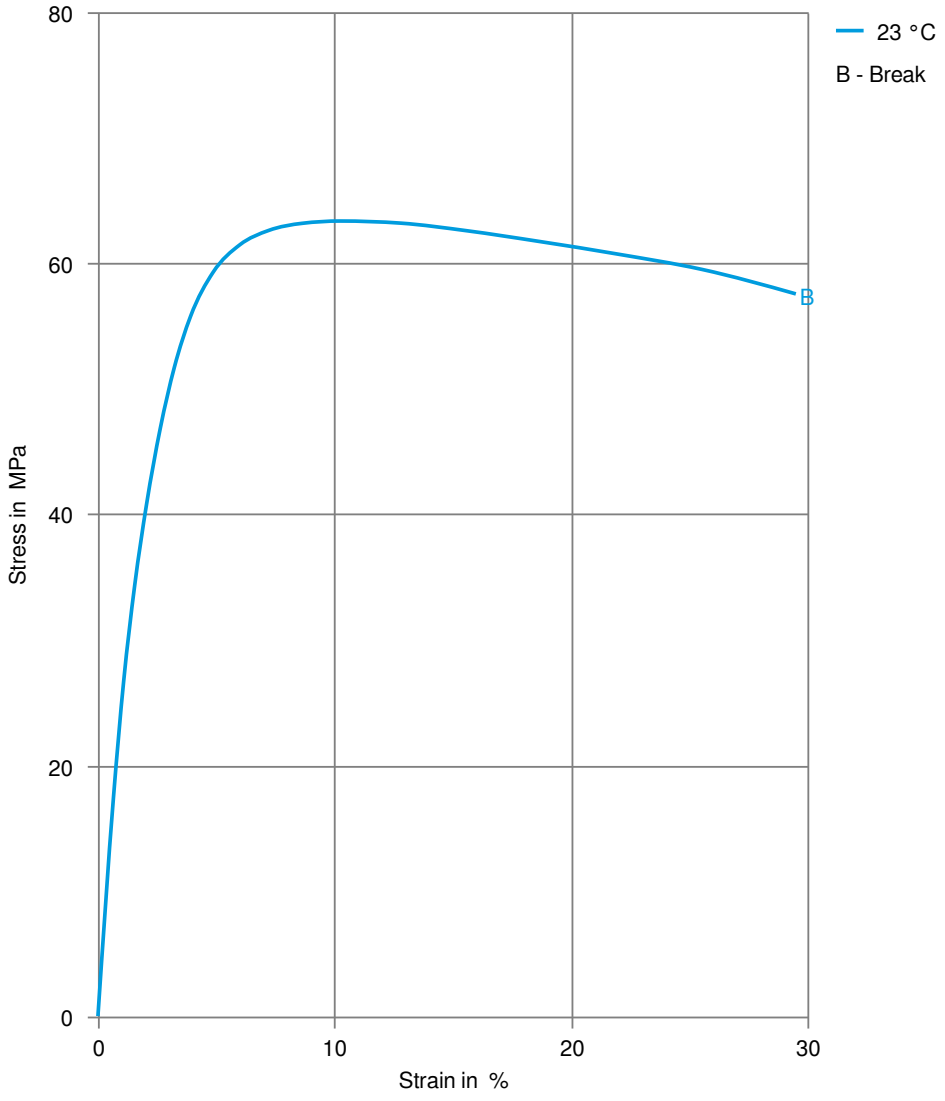
Stress-strain, 50mm/min



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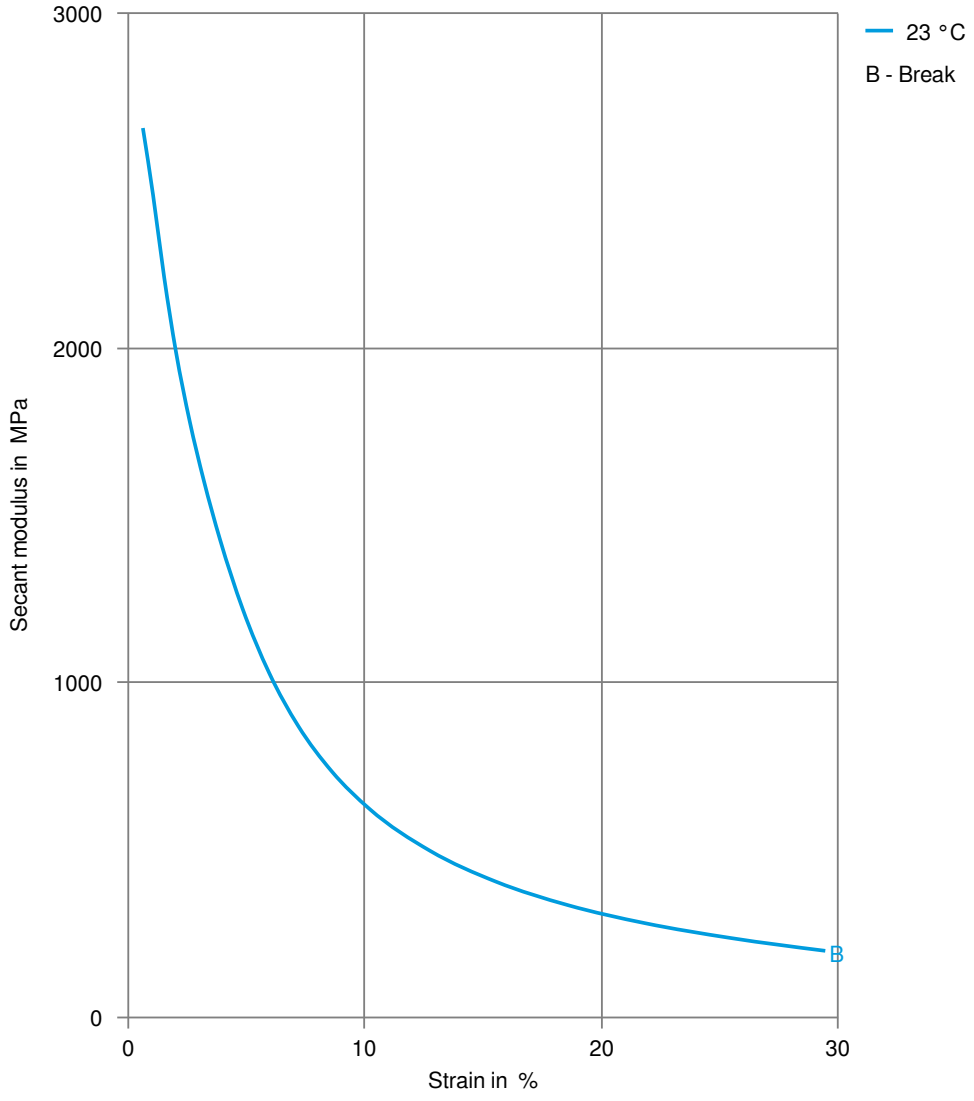
Secant modulus-strain, 50mm/min



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