

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 Part Marking Code	POM >POM<		ISO 1043 ISO 11469
Rheological properties			
Melt volume-flow rate Temperature Load Moulding shrinkage, parallel Moulding shrinkage, normal	8.5 190 2.16 2.0 1.8	kg %	ISO 1133 ISO 294-4, 2577 ISO 294-4, 2577
Typical mechanical properties			
Tensile modulus Tensile stress at yield, 50mm/min Tensile strain at yield, 50mm/min Nominal strain at break Flexural modulus Flexural strength Tensile creep modulus, 1h Tensile creep modulus, 1000h Charpy impact strength, 23°C Charpy impact strength, -30°C Charpy notched impact strength, 23°C Charpy notched impact strength, -30°C Ball indentation hardness, H 358/30 Poisson's ratio [C]: Calculated	9 20 2600 65 2300 1100 120 120 6 6	MPa % MPa MPa	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 899-1 ISO 899-1 ISO 179/1eU ISO 179/1eU ISO 179/1eA ISO 179/1eA ISO 2039-1
Thermal properties Melting temperature, 10°C/min Temperature of deflection under load, 1.8 MPa Coefficient of linear thermal expansion (CLTE), parallel	166 100 110	-	ISO 11357-1/-3 ISO 75-1/-2 ISO 11359-1/-2



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		
Back pressure	2	MPa	

Characteristics

Processing	
Delivery form	
Special characteristics	

Additional information

Processing Notes

Injection Moulding, Other Extrusion
Pellets
Low wear / Low friction, Low emissions

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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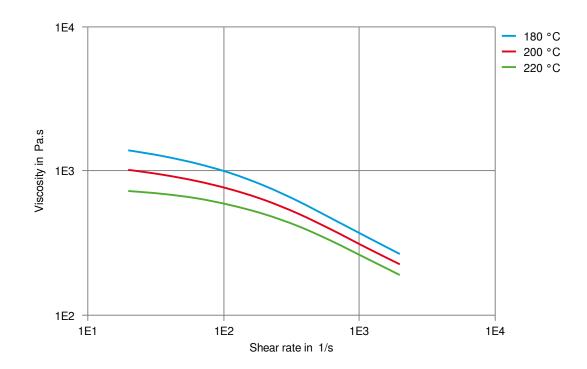




Automotive

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

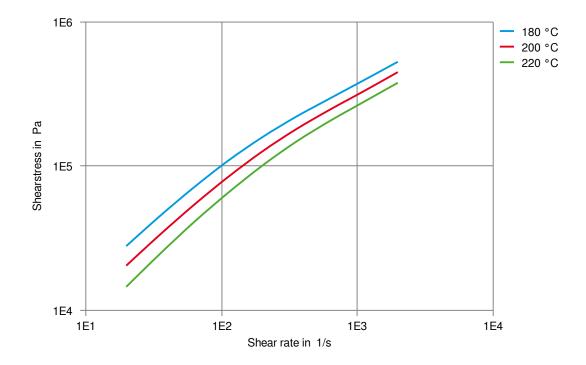
Viscosity-shear rate







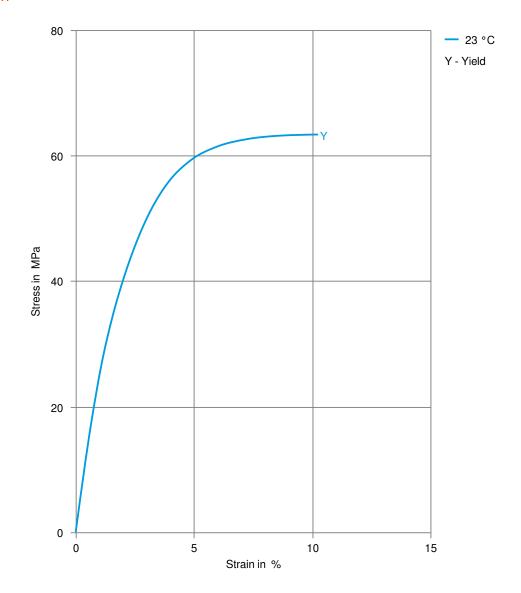
Shearstress-shear rate







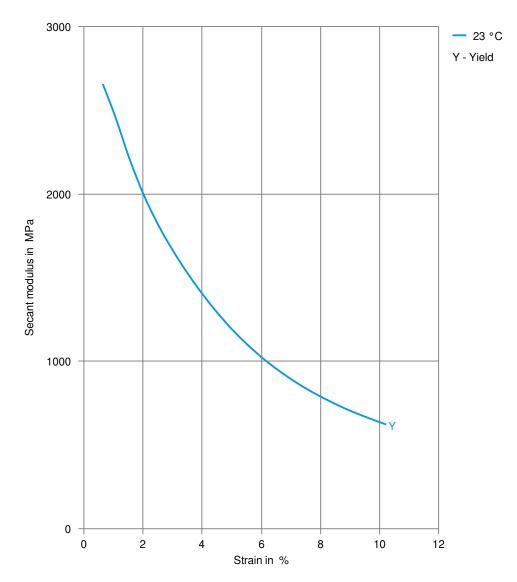
Stress-strain







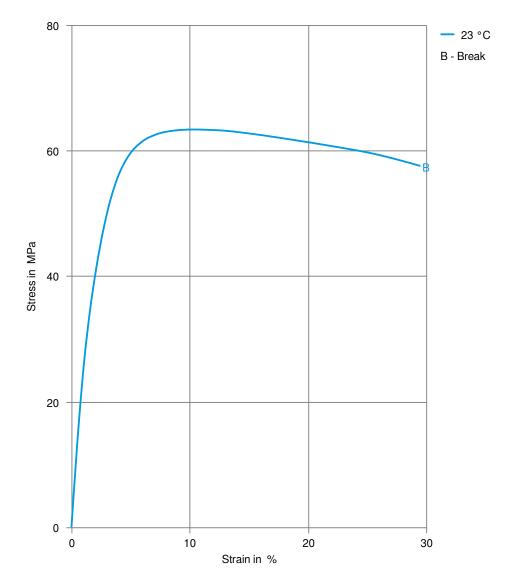
Secant modulus-strain







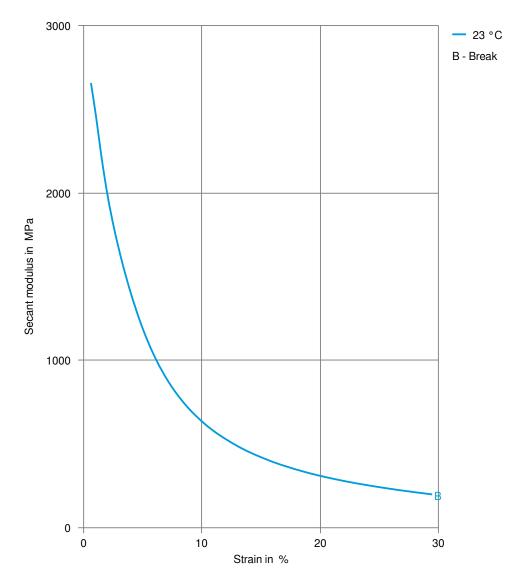
Stress-strain, 50mm/min







Secant modulus-strain, 50mm/min



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