

Tribological; Low Emission

Chemical abbreviation according to ISO 1043-1: POM-KD10

Molding compound ISO 29988-POM-K,KD10,GLNRS2,3-2

POM copolymer Injection molding type, special modified with anti-friction additives for prevention of squeaking noise; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. Ranges of applications: For sliding combinations with low wear and low coefficient of friction, prevents squeaking noise. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1,5 mm. Reduced emission grade. Emissions according to VDA 275 < 5 mg/kg Preliminary Datasheet

Product information

Part Marking Code	POM-KD10		ISO 11469
Rheological properties			
Melt volume-flow rate	7	cm ³ /10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Typical mechanical properties			
Tensile Modulus	2700	MPa	ISO 527-1/-2
Yield stress, 50mm/min	52	MPa	ISO 527-1/-2
Yield strain, 50mm/min	7	%	ISO 527-1/-2
Nominal strain at break	16	%	ISO 527-1/-2
Flexural Modulus	2600	MPa	ISO 178
Flexural Strength		MPa	ISO 178
Charpy impact strength, 23°C		kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C		kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C		kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C		kJ/m²	ISO 179/1eA
Ball indentation hardness, H 358/30	135	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	80	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	140	°C	ISO 306
Coeff. of linear therm. expansion, parallel	120	E-6/K	ISO 11359-1/-2
Other properties			
Density	1420	kg/m³	ISO 1183
,		5	

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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

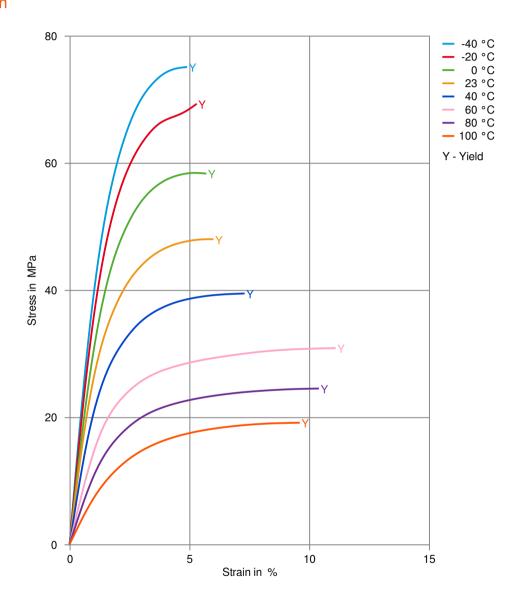
Characteristics

Additives Release agent

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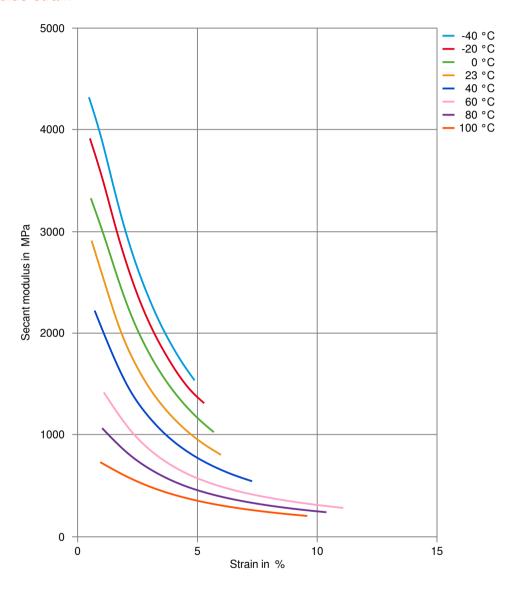
Stress-strain



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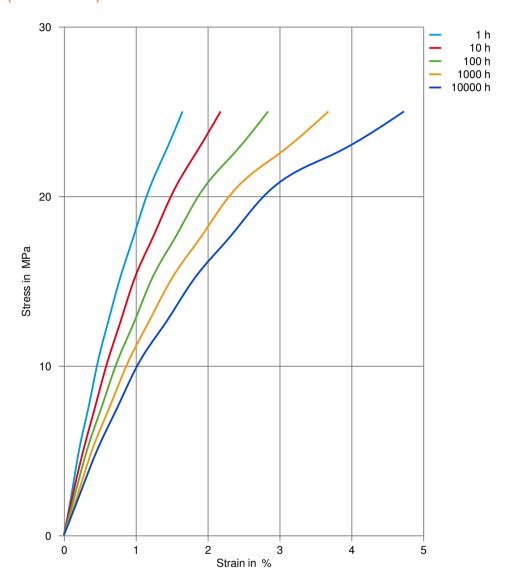
Secant modulus-strain



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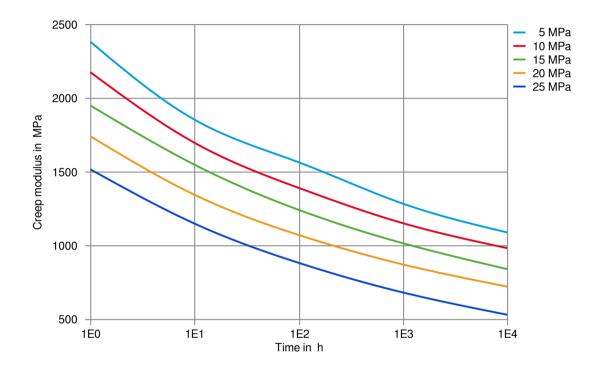
Stress-strain (isochronous) 23°C



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Creep modulus-time 23°C



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Processing Texts

Longer pre-drying times/storage

The product can then be stored in standard conditions until processed.

Other Approvals

Other Approvals

OEM	Specification	Additional Information
Mercedes-Benz Group (Daimler)	DBL 5404	BQF

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Revised: 2023-05-26 Source: Celanese Materials Database

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