

Low Emission

POM copolymer

Standard injection molding grade with reduced emissions especially for automotive interior application.

Burning rate according to FMVSS 302 < 100 mm/min (1 mm thickness)

Emission according to VDA 275 < 2 mg/kg (natural grades) Emission according to VDA 275 < 5 mg/kg (colored grades)

### Rheological properties

Melt volume-flow rate	8	cm <sup>3</sup> /10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.9	%	ISO 294-4, 2577

### Typical mechanical properties

Tensile Modulus	2700	MPa	ISO 527-1/-2
Yield stress, 50mm/min	64	MPa	ISO 527-1/-2
Yield strain, 50mm/min	10	%	ISO 527-1/-2
Nominal strain at break	35	%	ISO 527-1/-2
Flexural Modulus	2600	MPa	ISO 178
Tensile creep modulus, 1h	2400	MPa	ISO 899-1
Tensile creep modulus, 1000h	1200	MPa	ISO 899-1
Charpy impact strength, 23°C	220 <sup>[P]</sup>	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	220	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	6.5	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m²	ISO 179/1eA
[P]: Partial Break			

### Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	104 °C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	157 °C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	150 °C	ISO 306
Coeff. of linear therm. expansion, parallel	120 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	120 E-6/K	ISO 11359-1/-2

### **Electrical properties**

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Relative permittivity, 100Hz	4	IEC 62631-2-1
Relative permittivity, 1MHz	4	IEC 62631-2-1
Dissipation factor, 100Hz	20 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	50 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

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Comparative tracking index PLC 0 PLC UL 746A

#### Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.65 %	Sim. to ISO 62
Density	1410 kg/m <sup>3</sup>	ISO 1183

## Injection

100 - 120	°C
3 - 4	h
0.15	%
0.2 - 0.21	m/s
80 - 120	°C
4	MPa
slow-medium	
	3 - 4 0.15 0.2 - 0.21 80 - 120 4

#### Characteristics

Additives Release agent

#### Additional information

Injection molding

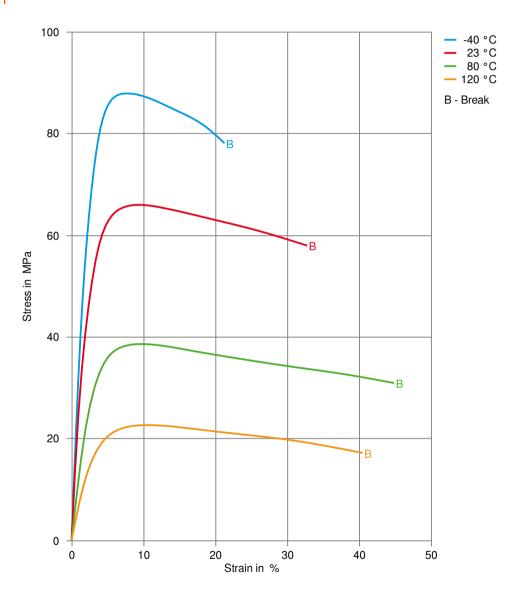
Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Melt temperature 180-190 °C Mould temperature 60-120 °C

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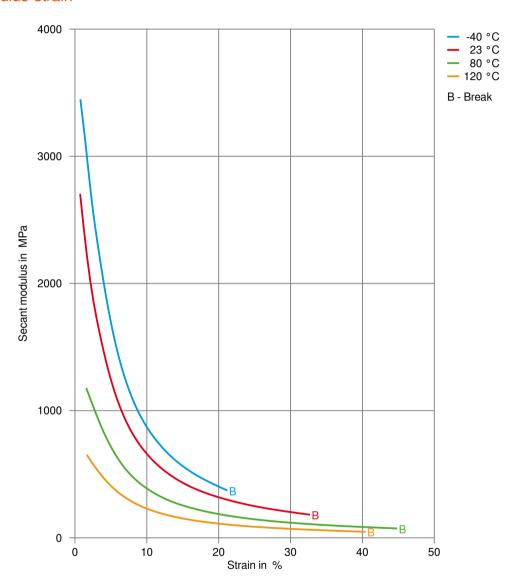
#### Stress-strain



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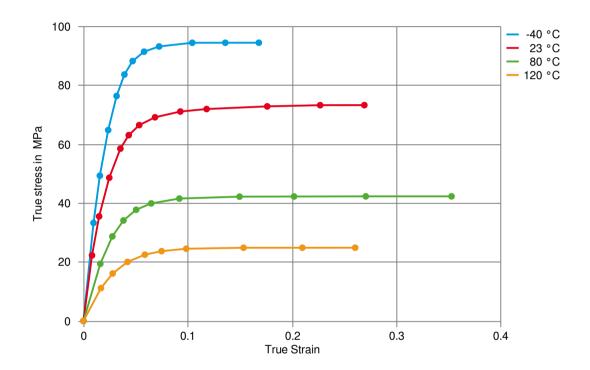
#### Secant modulus-strain



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#### True stress-strain



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**Processing Texts** 

Pre-drying recommended

Injection molding

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

plasticating screws will fit.

Melt temperature 180-190 °C Mould temperature 60-120 °C

Injection molding Preprocessing To achive low emission values pre drying using a recirculating air dryer (100 to

120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,1 %

Injection molding Postprocessing Conditioning e.g. moisturizing is not necessary.

Other Approvals

Other Approvals

OEM	Specification	Additional Information
Mercedes-Benz Group (Daimler)	DBL 5404	BQF
Mercedes-Benz Group (Daimler)	DBL 5410	Black
Dongfeng Motor	SLCLBG2018035	
Ford	WSK-M4D635-A2	
GM	GMW17008P-POM-C2	
Stellantis - Chrysler	CPN 1586	Black
Stellantis - Chrysler	CPN 1532	Natural
Li Auto	Q/LiA5310020	2019 (V1)
Renault	EP03-3	PMR2020
Renault	IP13f	PMR2020
Renault	IP13g	PMR2020
Renault	UB15	PMR2020
VW Group	TL 524 76	Black

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