

**Product Texts**

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

Molding compound ISO 29988-POM-K,KD10,GNRS2,3-2

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. UL-registration in natural and black and a thickness more than 1.5 mm as UL 94 HB. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1,5 mm. Ranges of applications: For sliding combinations with low wear and low coefficient of friction, prevents squeaking noise. UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

Flammability @1.6mm nom. HB  
thickn.

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Flammability at thickness h (3.18 HB  
mm)

UL recognition (h)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	<b>6.5</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>190</b>	°C	-
Load	<b>2.16</b>	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	<b>2.1</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>1.7</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>2850</b>	MPa	ISO 527
<sup>[C]</sup> Yield stress	<b>53</b>	MPa	ISO 527
<sup>[C]</sup> Yield strain	<b>7</b>	%	ISO 527
<sup>[C]</sup> Nominal strain at break	<b>16</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>90</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>85</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>4</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>4</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>166</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>80</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>120</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>1.6</b>	mm	-
<sup>[C]</sup> Burning Behav. at thickness h	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>3.2</b>	mm	-
Yellow Card available	<b>yes</b>	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	<b>4.1</b>	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	<b>4.1</b>	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	<b>35</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	<b>75</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	<b>1E12</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Surface resistivity	<b>1E14</b>	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	1.2	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.2	%	Sim. to ISO 62
<sup>[C]</sup> Density	1420	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	3 - 6	h	-
Processing humidity	≤0.2	%	-
Melt temperature	190 - 210	°C	-
Mold temperature	80 - 120	°C	-

**Characteristics**

**Processing**

Injection Molding, Other Extrusion

**Delivery form**

Pellets, Black, Natural Color

**Additives**

Lubricants, Release agent

**Features**

Thermal Stability, Tribologic Grade, Copolymer

**Chemical Resistance**

Alkali Resistance, Solvent Resistance, Hydrolytically Stable, Oxidation Resistance

**Applications**

Automotive

**Regional Availability**

North America, Europe, South and Central America, Near East/Africa

**Other text information**

**Injection molding**

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

Conditioning e.g. moisturizing is not necessary.