

**Product Texts**

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNR, 02-003, GF20 POM copolymer Injection molding type, reinforced with ca. 20 % glass fibers; high resistance to thermal and oxidative degradation; reduced thermal expansion and shrinkage. UL-registration in natural and black and a thickness more than 1.5 mm as UL 94 HB, temperature index UL 746 B, electrical 105 °C, mechanical 105 °C Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm thickness. Ranges of applications: For molded parts with high strength and rigidity as well as higher hardness. FMVSS = Federal Motor Vehicle Safety Standard (USA) UL = Underwriters Laboratories (USA)

Flammability @1.6mm nom. HB -  
 thickn.  
 Flammability at thickness h (3 HB UL recognition (h)  
 mm)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	<b>4.5</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>0.7</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>1.1</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>7200</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>120</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>3</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>35</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	<b>40</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>8</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>8</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>159</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 8.00 MPa	<b>105</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>50</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>80</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>1.5</b>	mm	-
<sup>[C]</sup> Burning Behav. at thickness h	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>3.0</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>4.3</b>	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	<b>4.3</b>	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	<b>30</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	<b>60</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
<sup>[C]</sup> Electric strength	<b>35</b>	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	<b>0.85</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>0.19</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1550</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

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

**Characteristics**

**Processing**

Injection Molding

**Chemical Resistance**

Oxidation Resistance

**Delivery form**

Pellets, Black, Natural Color

**Certifications**

Drinking water contact

**Additives**

Release agent

**Applications**

Automotive

**Features**

Thermal Stability, Copolymer

**Regional Availability**

North America, Europe, Asia Pacific, 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.