

## technical plastic: Polyamide (PA) & Polyoxymethylen (POM)

### application

PA & POM for the production of gears | sealing rings | guide elements | pulleys | control rollers | pump housings | ball bearing cages | plain bearings

### properties

PA is a universal plastic used for the construction and maintenance of machines | very high elongation at break | high impact strength high tensile strength  
POM is known as a versatile engineering plastic known. It has high strength and dimensional stability | high impact strength and tensile strength

### storage

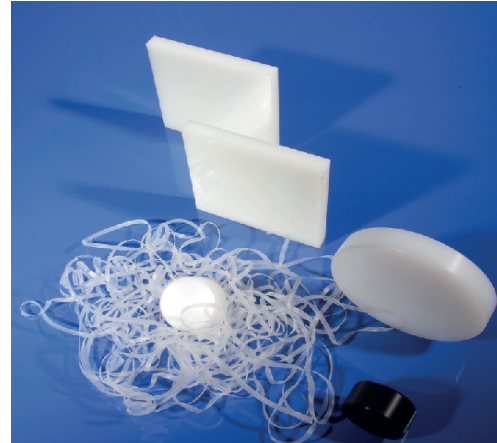
Depending on temperature and humidity Dimensional changes may occur. It is advisable to prepare the plastic for the to the processing temperature.

### processing

In order to drill these plastics, the part to be preheat the part to be machined to 70 °C. Mechanical processing can lead to cracks cracks can occur as a result of internal stresses being released may occur. Preheat the material! Heat is very poorly dissipated through the dissipated through the chip. Good cooling is necessary.

### product range

We offer the above plastics as semi-finished semi-finished products in different dimensions and thicknesses as sheets | solid rods



properties	values	
quality	PA	POM C
colour	natur, black	
gravity (g/cm <sup>3</sup> ) ISO 1183	1,14	1.41
moisture absorption (%) ISO 62 (at saturation in normal climate 23°C / 50% r.F.)	2,50	0,20
ball indentation hardness (MPa) ISO 2039-1 (30 sec.-value)	150	140
Rockwellhardness, ISO 2039-2 (measured on 10 mm thick test specimen)	M 85	M 84
Charpy-impact strength (kJ/m <sup>2</sup> ) ISO 179/1 eU (+23°C)	without breakage	220
Charpy-notch impact strength (kJ/m <sup>2</sup> ) ISO 179/1 eA (+23°C)	5,5	8
yield stress (MPa) ISO 527-2 (v = 50 mm/min)	76	63
spec. volume resistance (Ohm · m) IEC 60093	≥ 10 <sup>12</sup>	≥ 10 <sup>13</sup>
spec. surface resistance (Ohm) IEC 60093	≥ 10 <sup>13</sup>	≥ 10 <sup>13</sup>
electrical dielectric strength K20/K20 (kV/mm) IEC 60243-1 (in trafo oil)	25	20
melting temperature (°C) ISO 3146 (DSC, 10 K/min)	220	165
flammability according to UL-Standard (class) UL 94 (thickness 3 and 6 mm)	HB	HB
heat deflection temperature (°C) ISO 75-2 (method HDT A)	70	96
temperature range (C°) (in air)	ca. -40 ~+85 (short-term +160)	ca. -40 ~+105 (short-term +140)



Hinweis: Die technischen Kennwerte sind lediglich eine Planungshilfe. Insbesondere stellen sie keine zugesicherten Eigenschaften dar. Die Informationen im Datenblatt beruhen auf Einzelmessungen und unseren derzeitigen Kenntnissen und Erfahrungen. Produktionsbedingte Änderungen vorbehalten.  
Wir weisen darauf hin, dass die individuellen Einsatzbedingungen Einfluss auf die Eigenschaften jedes einzelnen Produktes nehmen. Aus diesem Grund ist der Kunde verpflichtet, die Materialien einer Eignungsprüfung zu unterziehen. Der Einsatz unserer Materialien erfolgt ausschließlich im Verantwortungsbereich des Anwenders.

We point out that all information within this catalogue must be considered as rough guidelines. All information provided does not describe any warranted characteristics of materials. The information in this catalogue is based upon individual measurements representing our best knowledge as of the day of measurement. They are subject to technical modifications. We point out that the specific operation conditions may influence the properties of each individual product. For this reason, the customer is required to perform an aptitude test of the materials. The use of our materials is the sole responsibility of the user.

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