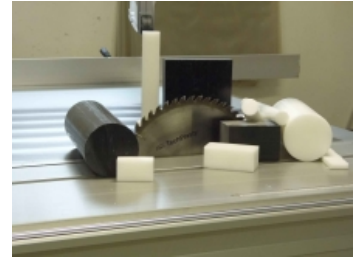


# POM-C - polyacetal copolymer

**Other material names POM-C:** Polyacetal, Polyoxymethylene, Polyformaldehyde

**Material group:** POM

POM-C is a unique balance of physical properties not available in most other thermoplastics. This copolymer acetal is an engineering plastic made for wide-ranging universal applications in many different industries. The key performance characteristics of unmodified POM-C include high mechanical strength and rigidity, excellent wear, low moisture absorption and excellent dimensional stability. Unfilled POM-C copolymer offers high crystallinity and a good degree of toughness (even in the lower temperature range), combined with good chemical resistance.



## Color of material:

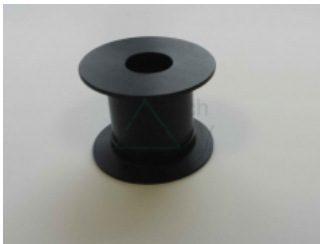
Natur

Black



## Typical applications:

- gears
- rollers
- electrical test part with dozens of tight tolerance machined holes
- guide rollers



## The material is used in:

Food industry  
Electrotechnical industry  
Automobile industry  
Packaging industry  
Dairy industry  
Meat processing industry  
Engineering industry  
Production of single-purpose machines

## Features:

- high strength
- resistant to cleaning agents
- stiff
- high toughness
- very good electrical insulation
- good machinability
- good slide and wear properties
- difficult to bond

**Material availability:** Material is in stock

Material properties table

<b>Specific weight</b>	1.41 g/cm <sup>3</sup>
<b>Yield strength</b>	65 N/mm <sup>2</sup>
<b>Allowable mean pressure deformation 1%</b>	19.00 N/mm <sup>2</sup>
<b>Allowable mean pressure deformation 2%</b>	35.00 N/mm <sup>2</sup>
<b>Allowable mean pressure deformation 5%</b>	67.00 N/mm <sup>2</sup>
<b>p.v dry limit</b>	0.15 MPa.m/s
<b>Flexural strength</b>	115 N/mm <sup>2</sup>
<b>Tensibility</b>	40 %
<b>Flexural modulus</b>	2 900 N/mm <sup>2</sup>
<b>Tensile modulus</b>	3 000 N/mm <sup>2</sup>
<b>Impact toughness</b>	bez zlomu
<b>Notched toughness</b>	>10 kJ/m <sup>2</sup>
<b>Ball hardness</b>	150 N/mm <sup>2</sup>
<b>Friction coefficient</b>	0.32
<b>Sliding wear</b>	8.90 um/km
<b>Abrasive wear</b>	700
<b>Antistatic material</b>	No
<b>Permittivity</b>	3.80
<b>Electrical strength</b>	20 kV/mm
<b>Specific internal resistance</b>	10 <sup>(14)</sup> Ω
<b>Specific surface resistance</b>	10 <sup>(13)</sup> Ω.cm
<b>Melting point</b>	178 °C
<b>Thermal expansion</b>	10 10 <sup>(-5)</sup> /K
<b>Thermal conductivity</b>	0.31 W/(K.m)
<b>Permanent use temperature</b>	-30 ; 100 °C
<b>Transient temperature of use</b>	-30 ; 140 °C
<b>Absorbability</b>	0,2 %
<b>Water absorption</b>	0,8 %
<b>Resistance - oils</b>	resistant
<b>Acid resistance</b>	not resistant
<b>Durability - alcali</b>	resistant
<b>Food contact</b>	Yes
<b>Special features</b>	• very good machinability by chip machining

Engineering plastics are supplied in the form of bars, plates, strips, tubes and sheets. From the semi-finished products the company TechPlasty has regularly in stock, we also supply blanks.

All standard and special materials are designed to meet your specific requirements. Their mechanical, thermal, and electrical properties and chemical resistance satisfy the most demanding requirements and this allows them to work even in the most difficult conditions. If you need advice when choosing the appropriate material for your application, please contact us. We'll gladly advise you. You can utilize the long-term experience of our technical advisors free-of- charge, who can visit you right in your operation and solve your requirements for engineering plastics directly at the site of their usage.

**TechPlasty, s.r.o.**

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