

# POM-H - polyacetal homopolymer

**Other material names POM-H:** Polyoxymethylene, Polyformaldehyde

**Material group:** POM

POM-H is a homopolymer acetal. This homopolymer acetal has exceptional sliding characteristics and good wear resistance properties. In comparison to POM-C, POM-H has a slightly higher density, hardness and strength due to its higher crystallinity. In addition, POM-H has good electrical insulating properties, as well as exceptional machining characteristics, making POM-H one of the most versatile engineering materials available today.

## Color of material:

White



## Typical applications:

- precise and dimensionally stable elements

## The material is used in:

Food industry  
Electrotechnical industry  
Automobile industry  
Engineering industry

## Features:

- high strength
- good slide and wear properties
- electrically insulating
- difficult to bond
- good chemical resistance
- good machinability
- easy to polish

**Material availability:** Material in stock at the manufacturer  
Material properties table

<b>Specific weight</b>	1.43 g/cm <sup>3</sup>
<b>Yield strength</b>	78 N/mm <sup>2</sup>
<b>Allowable mean pressure deformation 1%</b>	22.00 N/mm <sup>2</sup>
<b>Allowable mean pressure deformation 2%</b>	40.00 N/mm <sup>2</sup>
<b>Allowable mean pressure deformation 5%</b>	75.00 N/mm <sup>2</sup>
<b>Tensibility</b>	35 %
<b>Tensile modulus</b>	3 600 N/mm <sup>2</sup>
<b>Impact toughness</b>	200
<b>Notched toughness</b>	>10 kJ/m <sup>2</sup>
<b>Ball hardness</b>	160 N/mm <sup>2</sup>
<b>Friction coefficient</b>	0.34
<b>Antistatic material</b>	No
<b>Permittivity</b>	3.80

<b>Electrical strength</b>	20 kV/mm
<b>Specific internal resistance</b>	$10^{14} \Omega$
<b>Specific surface resistance</b>	$10^{13} \Omega \cdot \text{cm}$
<b>Melting point</b>	175 °C
<b>Thermal expansion</b>	$10 \cdot 10^{-5} / \text{K}$
<b>Thermal conductivity</b>	0.31 W/(K.m)
<b>Permanent use temperature</b>	-50 ; 90 °C
<b>Transient temperature of use</b>	-50 ; 150 °C
<b>Absorbability</b>	0.2 %
<b>Water absorption</b>	0.85 %
<b>Resistance - oils</b>	resistant
<b>Acid resistance</b>	not resistant
<b>Durability - alkali</b>	conditionally resistant
<b>Food contact</b>	Yes

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.**

Kysucká 7/A  
010 01 Žilina  
Slovakia

