

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

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

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

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