

DSM 3.7.2

ACETAL_Homopolymer_ (Cast)

General:

Acetal (**POM-H**) resins are among the strongest and stiffest of all semi crystalline thermoplastics, and are characterized by good fatigue life, low moisture sensitivity, high resistance to solvents and chemicals, combined with good electrical properties.

Two types of acetals are available, namely; homopolymer and a copolymer. This DSEI uses the **Homopolymer** variant. The tensile strength of a typical homopolymer is about 15% higher than that of the corresponding copolymer and the modulus is nearly 13% greater equates to better wear resistance.

Benefits:

- Maximum Continuous Service Temperature is 95°C (200°F.)
- Dimensionally stable including flatness up to continuous service temp.
- Good electrical insulation and chemical resistance to solvents & hydrocarbons.
- High surface hardness including stiffness. Easy machining.
- Good fatigue & creep resistance.

Limitations:

- Become brittle with long term exposure to low temperatures and/or sunlight (UV). Poor fire resistance (UL 94 HB).
- Sensitive to acid & chlorine attack
- Resistant to bonding, when using adhesives or solvents.
- Risk of 'centre line porosity' 'in extruded profiles.

ASM (DEK) Applications:

- Bushes; Rollers; Sleeves & Housings.

Profiles:

- Plate: 3 – 150 mm thick
- Rod: 5 – 305 mm Diameter
- Tube 25 – 230 mm Outside Diameter

These values are representative. For critical applications, refer to data-sheet.

MECHANICAL PROPERTIES					
MATERIAL DETAILS	HARDNESS Shore A	TENSILE STRENGTH:	YOUNGS MODULUS:	POISSONS RATIO:	DENSITY:
POM-H	---	78 MPa	3.3 GPa	0.37	1430 Kg/m³

Alternatives:

Alternative polymers are allowed only with the express written permission of ASMPT. Please email details of your request to engineering_enquiries@asmpt.com

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DCR	7135	44832							

