

ACETAL HOMOPOLYMER (POM-H)

SPECIFICATIONS SHEET

DETAILS

Chemical Name: Polyoxy-methylene Common/Trade

Names: POM-H Delrin® Ertacetal H®, POM-C Acetal Celcon® Hostafom® Ertacetal C®

Abbreviation: POM-H (Acetal Homopolymere), POM-C (Acetal Copolymere)

Properties (Colour): Natural (White), Black Properties (Form): Rod, Plate, Tube, Custom

Machining: Machines well with sharp conventional tooling for plastics.

Types: Glass Filled, Carbon Filled, PTFE Filled

Chemical Resistance: Acetals have good resistance to solvents and lubricants but are attacked by strong acids and alkalis.

KEY BENEFITS

- Solvent, fuel & moisture resistance
- Suitable for use in moist environments
- Good dimensional stability
- Moderate mechanical strength & stiffness
- Low friction
- Excellent properties in wet & dry environments Easy to machine

MECHANICAL PROPERTIES

Density ρ (g/cm ³)	1.42
Tensile Strength at Yield σ (Mpa)	70
Elongation at Break %	40
Modulus of Elasticity Tensile E_t (Mpa)	3300
Modulus of Elasticity Bending E_b (Mpa)	2620
Impact Strength kJ/mm ²	NO BREAK
Hardness Ball Indent	170
Creep 1 % after 1000hr MPa	13
Coefficient of friction against Steel μ	0.34

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(CONT.)

THERMAL PROPERTIES

Melting Point °C	175
Glass Transition Temperature °C	-38
Thermal Conductivity W/M°C	0.31
Specific Heat J/(g.K)	1.5
Coefficient of Linear Expansion α 10 ⁻⁶ .°K	100
Safe Working Temp. Short Term °C	170
Safe Working Temp. Continuous °C	100
Minimum Working Temperature °C	-40

ELECTRICAL PROPERTIES

Dielectric Constant ϵ 106 Hz	0.005
Dielectric loss Factor $\tan\delta$ 106 Hz	10 ¹⁵
Volume Resistance Ω .cm	10 ¹³
Surface Resistance Ω	10 ¹³
Dielectric Strength kV/mm	>51 ¹³
Moisture Absorption % (at 50%RH)	-

Whilst all care has been taken to provide accurate & up to date information, we cannot provide legal certification of properties. We recommend that this information be used as a design guide only. Actual testing should be undertaken to confirm data if certification is required.