

Acetal H

Material Information



Acetal H

Product full identity:

Polyoxymethylene homopolymer / POM H

Acetal Homopolymer offers low friction, excellent sliding properties, and higher stiffness, hardness, and creep resistance than Acetal Copolymer. Ideal for bearings, gears, wear guides, and locking systems, it provides long-lasting performance in high-demand mechanical applications.

Properties

- High strength and hardness
- Good creep resistance
- Wide temperature range (+105 to -50°C)
- Low moisture absorption
- Good sliding properties

Applications

- Bearings
- Gears
- Wear guides
- Locking systems

Forms



Acetal H

Technical Properties

Physical	Unit	Test Method	Result
Specific gravity	g/cm ³	ISO 1183-1	1.43
Water absorption until saturation at 23°C	%	ISO 62	0.80
Maximum service temp. Upper temp limit – short term	°C	-	-
Maximum service temp. Upper temp limit – long term	°C	-	105
Lower temp limit	°C	-	-50
Mechanical	Unit	Test Method	Result
Tensile strength	MPa	ISO 527-1/-2	78
Elongation at yield	%	-	-
Tensile strength at break	MPa	ISO 527-1/-2	25
Unnotched impact strength	kJ/m ²	ISO 179-1/1eU	No break
Notch impact strength	kJ/m ²	ISO 179-1/1eA	10
Ball indentation / Rockwell hardness	MPa	ISO 2039-2	88
Shore-D		ISO 868	81
Flexural modulus of elasticity	MPa	ISO 178	3450
Tensile modulus of elasticity	MPa	ISO 527-1/-2	3700
Thermal	Unit	Test Method	Result
Vicat-softening point VST/B/50	°C	-	-
Heat deflection temperature HDT/B	°C	ISO 75-1/-2	110
Coefficient of linear thermal expansion 23 – 100°C	m/(m.K)	-	110 x 10 ⁻⁶
Thermal conductivity at 23°C	W/mK	-	0.31
Electrical	Unit	Test Method	Result
Volume resistivity	Ω x m	IEC 62631-3-1	10 ¹⁴
Surface resistivity	Ω	ANSI/ESD STM 11.11	10 ¹³
Insulation resistivity	Ω . cm	-	-
Dielectric constant at 1MHz		IEC 60250	3.80
Dielectric loss factor at 1MHz		IEC 60250	0.008
Dielectric strength	kV/mm	IEC 60243-1	20
Comparative tracking index (CTI)		IEC 60112	600
Additional Data	Unit	Test Method	Result
Bondability		-	-
Food compliance – FDA		FDA	No
Food compliance – EU		EU 10/2011	No
Antistatic		-	-
Flammability	Unit	Test Method	Result
Fire performance		UL 94	HB
Optical	Unit	Test Method	Result
N/A	N/A	N/A	N/A

All information provided in this Product Datasheet is for guide purposes only. The data has been taken from standard test results provided by our manufacturers.