



ACETAL POM-H

Chemical Designation POM-H (Polyacetal (Homopolymer)) **Colour** white opaque **Density** 1.43 g/cm³

Mechanical properties	parameter	value	unit	norm	comment	
Modulus of elasticity (tensile test)	1mm/min	3400	MPa	DIN EN ISO 527-2	1)	(1) For tensile test: specimen type 1b
Tensile strength	50mm/min	79	MPa	DIN EN ISO 527-2		(2) For flexural test: support span 64mm, norm specimen.
Tensile strength at yield	50mm/min	79	MPa	DIN EN ISO 527-2		(3) Specimen 10x10x10mm
Elongation at yield	50mm/min	37	%	DIN EN ISO 527-2		(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
Elongation at break	50mm/min	45	%	DIN EN ISO 527-2		(5) For Charpy test: support span 64mm, norm specimen. n.b. = not broken
Flexural strength	2mm/min, 10 N	106	MPa	DIN EN ISO 178	2)	(6) Specimen in 4mm thickness
Modulus of elasticity (flexural test)	2mm/min, 10 N	3600	MPa	DIN EN ISO 178		
Compression strength	1% / 2% / 5% 5mm/min, 10 N	19/33/69	MPa	EN ISO 604	3)	
Compression modulus	5mm/min, 10 N	2700	MPa	EN ISO 604	4)	
Impact strength (Charpy)	max. 7,5J	n.b.	kJ/m ²	DIN EN ISO 179-1eU	5)	
Notched impact strength (Charpy)	max. 7,5J	15	kJ/m ²	DIN EN ISO 179-1eA		
Ball indentation hardness		185	MPa	ISO 2039-1	6)	
Thermal properties	parameter	value	unit	norm	comment	
Glass transition temperature		-60	°C	DIN EN ISO 11357	1)	(1) Found in public sources.
Melting temperature		182	°C	DIN EN ISO 11357		(2) Found in public sources. Individual testing regarding application conditions is mandatory.
Service temperature	short term	150	°C		2)	
Service temperature	long term	110	°C			
Thermal expansion (CLTE)	23-60°C, long.	12	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2		
Thermal expansion (CLTE)	23-100°C, long.	13	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2		
Specific heat		1.3	J/(g*K)	ISO 22007-4:2008		
Thermal conductivity		0.43	W/(K*m)	ISO 22007-4:2008		
Electrical properties	parameter	value	unit	norm	comment	
Specific surface resistance		10 ¹⁴	Ω	DIN IEC 60093		
Other properties	parameter	value	unit	norm	comment	
Water absorption	24h / 96h (23°C)	0.05 / 0.1	%	DIN EN ISO 62	1)	(1) Ø ca. 50mm, h=13mm
Resistance to hot water/ bases		-	-	-	2)	(2) - poor resistance
Resistance to weathering		-	-	-		(3) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	3)	