

TECAFORM® AD HPV13 - Stock Shapes

Chemical Designation

POM-H (Polyacetal (Homopolymer))

Colour

brown

Density

1.5 g/cm³

Fillers

PTFE powder

Main features

- very good slide and wear properties
- good mechanical properties
- good machinability
- good chemical resistance
- low water absorption
- good dimensional stability

Target Industries

- food engineering
- power engineering
- conveyor technology
- gear manufacturing
- business machines
- packaging and paper machinery

Mechanical properties	condition	value		test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	340,000	psi	ASTM D 638	
Tensile strength at break	@ 73 °F	7000	psi	ASTM D 638	
Elongation at break	@ 73 °F	10	%	ASTM D 638	
Flexural strength	@ 73 °F	12,500	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	350,000	psi	ASTM D 790	
Impact strength (Izod)	@ 73 °F	1.0	ft-lbs/in	ASTM D 256	
Rockwell hardness	R Scale @ 73 °F	118		ASTM D 785	
Coefficient of friction	Static	0.07	%	ASTM D 3702	
Coefficient of friction	Dynamic, 40 psi, 50 fpm	0.12	%	ASTM D 3702	
Wear rate	Against Steel, 40 psi, 50 fpm	20*10 ⁻¹⁰	in ³ -min/ft-lbs-hr	ASTM D 3702	
Thermal properties	condition	value		test method	comment
Melting temperature		347	°F	-	
Deflection temperature	@264 psi	244	°F	ASTM D 648	
Deflection temperature	@ 66 psi	334	°F	ASTM D 648	
Service temperature	Long Term	185	°F	-	
Thermal expansion (CLTE)		5.1*10 ⁻⁵	in/in/°F	ASTM D 696	
Other properties	condition	value		test method	comment
Limiting PV	@ 100 fpm	1,600	ft-lbs/min	-	
Limiting PV	@ 10 fpm	12,000	ft-lbs/min	-	
Moisture absorption	@ 24 hrs, 73 °F	.11	%	ASTM D 570	

→ Resin specification:
ASTM D6778-06 POM0110 L13 B57230 superseding ASTM D4181-00 POM110L13A00000
Shapes specification:
ASTM D6100-11 S-POM0132

Material properties and averages can vary from one manufacturer to another. These properties are given as reference without any obligation or liability on behalf of Precision Punch and Plastics.