

## TECAFORM® AD HPV13 brown - Stock Shapes (rods, plates, tubes)

## Chemical Designation

POM-H (Polyacetal (Homopolymer))

Colour brown

Density

1.5 g/cm<sup>3</sup>

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

Mechanical properties	condition	value	unit	test method		comment		
Modulus of elasticity (tensile test)	@ 73 °F	380,000	psi	ASTM D 638		(1) publicly sourced data (2) publicly sourced data (3) publicly sourced data		
Tensile strength at yield	@ 73 °F	7700	psi	ASTM D 638		(3) publicly sourced data		
Elongation at break (tensile test)	@ 73 °F	10	%	ASTM D 638				
Flexural strength	@ 73 °F	13,000	psi	ASTM D 790	·····			
Modulus of elasticity (flexural test)	@ 73 °F	450,000	psi	ASTM D 790				
Compression strength	@ 73 °F, 10% strain	13,000	psi	ASTM D 695	_			
Compression strength	@ 73 °F, 1% strain	3000	psi	ASTM D 695				
Compression modulus	@ 73 °F	240,000	psi	ASTM D 695				
Impact strength (Izod)	@ 73 °F	1.5	ft-lbs/in	ASTM D 256				
Rockwell hardness	R Scale @ 73 °F	118		ASTM D 785	······			
Rockwell hardness	M Scale, @ 73 °F	78		ASTM D 785				
Coefficient of friction	Static	0.07		ASTM D 3702	1)			
Coefficient of friction	Dynamic, 40 psi, 50 fpm	0.12		ASTM D 3702	2)	<b></b>		
Wear rate	Against Steel, 40 psi, 50 fpm	20*10 <sup>-10</sup>	in³-min/ft-lbs-hr	ASTM D 3702	3)			
Thermal properties	condition	value	unit	test method		comment		
Melting temperature		347	°F	-	1)	(1) injection molded data (2) injection molded data (3) injection molded data (4) publicly sourced data (5) publicly sourced data		
Deflection temperature	@264 psi	244	°F	ASTM D 648	2)			
Deflection temperature	@ 66 psi	334	°F	ASTM D 648	3)			
Service temperature	Long Term	185	°F	-	4)			
Thermal expansion (CLTE)	range 85F to 140F	6.8*10 <sup>-5</sup>	in/in/°F	ASTM D 696	5)			
Other properties	condition	value	unit	test method		comment		
Limiting PV	@ 100 fpm	1,600	ft-lbs/min	-	1)	(1) publicly sourced data (2) publicly sourced data (3) 6.33 mm test thickness		
Limiting PV	@ 10 fpm	12,000	ft-lbs/min	-	2)			
Moisture absorption	@ 24 hrs, 73 °F	0.12	%	ASTM D 570				
Flammability (UL94)	6.33 mm			-	3)			

Resin specification: ASTM D6778-06 POM0110 L13 B57230 superseding ASTM D4181-00 POM110L13A00000

Shapes specification: ASTM D6100-11 S-POM0132

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Date: 2023/10/17