## **TECAFORM® HPV13**

## Acetal (POM) Homopolymer

Ensinger Inc.

## Message:

TECAFORM® HPV13 is a brown homopolymer acetal with an internal PTFE lubricant. Its low coefficient of friction, excellent PV values, toughness, wear resistance, and machinability make it an exceptional material for use in manyindustrial and military components with moving parts. Additionally, TECAFORM® HPV13 has superior chemical resistance and flexural fatigue properties, as well as low moistureabsorption associated with acetal materials. TECAFORM® HPV 13's range of exceptional properties makes it an ideal engineering plastic for use in precision instruments and measuring devices, as well as in many critical components in the automotive, aviation, military, industrial, food processing machinery, business equipment, and specialty valve areas.

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Rockwell Hardness (R-Scale, 23°C) 118 ASTM D785	Hardness	Nominal Value	Unit	Test Method
	Rockwell Hardness (R-Scale, 23°C)	118		ASTM D785

Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus (23°C)	2340	MPa	ASTM D638	
Tensile Strength (Break, 23°C)	48.3	MPa	ASTM D638	
Tensile Elongation (Break, 23°C)	10	%	ASTM D638	
Flexural Modulus (23°C)	2410	MPa	ASTM D790	
Flexural Strength (23°C)	86.2	MPa	ASTM D790	
Coefficient of Friction				
With self-dynamics <sup>1</sup>	0.12			
With Self-Static	0.070			
Wear Factor <sup>2</sup> (0.28 MPa, 0.25 m/sec)	40	10^-8 mm³/N·m	ASTM D3702	
Impact	Nominal Value	Unit	Test Method	
Notched Izod Impact (23°C)	53	J/m	ASTM D256	
Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load			ASTM D648	
0.45 MPa, not annealed	168	°C	ASTM D648	
1.8 MPa, not annealed	118	°C	ASTM D648	
Melting Temperature	175	°C		
CLTE - Flow	9.2E-5	cm/cm/°C	ASTM D696	
Maximum operating temperature-Long Term	85	°C		
Limiting Pressure Velocity - 10 fpm	12000	ft·lb/min		
Additional Information	Nominal Value	Unit		
Data obtained from extruded shapes material.				
NOTE				
1.	40 psi, 50 fpm			
2.	Against Steel			

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