



MANUFACTURING CORPORATION

- Plastics Machining
- Spring Energized Seals
- Rotary Lip Seals

### Material Data Sheet

Material: Tecaform™

Acetal Copolymer

Tecaform™ is a semi-crystalline thermoplastic offering high strength, stiffness and toughness. Tecaform™ is resistant to hot water, hydrocarbons and solvents, and it possesses good bearing and wear properties. It is available in natural and black grades. Tecaform™ is commonly used in bushing, rollers, wear strips and other applications requiring a combination of strength, low moisture absorption, chemical resistance and dimensional stability. Offers no centerline porosity and excellent machinability.

Mechanical Properties	ASTM Test Method	Value	Units
Density	D792	0.0507	lbs/in <sup>3</sup>
Specific Gravity	D792	1.41	g/cc
Water Absorption @ 24 hours, 73°F	D570	0.22	%
@ Saturation, 73°F	D570	0.8	%
Tensile Strength, 73°F	D638	8,800	psi
Tensile Modulus	D639	380,000	psi
Elongation ( at break), 73°F	D638	25	%
Flexural Strength, 73°F	D790	11,000	psi
Flexural Modulus of Elasticity, 73°F	D790	360,000	psi
Compressive Strength	D695	4,500	psi
Izod Impact Strength, 73°F	D256	1	ft-lb/in of notch
Rockwell Hardness, 73°F	D785	M - 86	M or R Scale
Shure Hardness			D Scale
Wear Factor Against Steel, 40 psi, 50 fpm	D3702	65 X 10 <sup>-10</sup>	in. <sup>3</sup> -min/ft.lbs.hr
Static Coefficient of Friction	D3702		
Dynamic Coefficient of Friction, 40 pcs, 50 fpm	D3702	0.21	
Thermal Properties			
Heat Deflection Temperature @ 66 psi	D648	316	°F
@ 264 psi	D648	230	°F
Coefficient of Linear Thermal Expansion	D696	4.7 X 10 <sup>-5</sup>	in/in./°F
Continuous Servicing Temperature, Intermittent		285	°F
Long Term	UL746B	195	°F
Specific Heat		0.4	BTU/lb -°F
Thermal Conductivity			
Melting Point	D2133	329	°F
Flammability	UL94	HB	(mm)
Electrical Properties			
Surface Resistivity	D257		ohm/square
Volume Resistivity	D257	1.0 x 10 <sup>15</sup>	ohm - cm
Dielectric Strength	D149	500	Volts/mil
Dielectric Constant, 60 Hz, 73°F, 50% RH	D150	3.7	
Dissipation Factor, 60 HZ, 73°F	D150	0.001	

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\*The values shown in these and the following charts are typical, average properties. Actual values may differ due to variations in resin formulations and processing methods. These values are obtained from sources believed to be reliable, including the resin manufacturers, converters and other published sources. However, they should not be used for specification or design purposes. The above information is provided by Ensinger Hyde.