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 as bushings, rollers, wear strips and other applications requiring a combination of strength, low moisture absorption, chemical resistance and dimensional stability.

- No centerline porosity
- Low moisture absorption
- Excellent machinability
- Good combination of mechanical properties
- Good dimensional stability
- Good wear and abrasion properties
- Black grade is FDA compliant
- Good property retention at elevated temperatures
- Chemical resistance to fuels and solvents, Tecaform™ is resistant to aqueous solutions with pH values ranging from 4 to 14.
- Natural grade is FDA, USDA, NSF and 3A Sanitary compliant

Tecaform™ is used in a wide variety of industrial applications requiring good strength and toughness, dimensional stability; wear resistance and the ability to operate in a wet environment with little absorption. Material handling, machinery and fluid handling are some of the common industries utilizing Tecaform™'s combination of properties. Typical applications are gears, wear strips, bushings, pump parts, fittings and rollers.

Property	ASTM Test Method	Units	**Tecaform™**
Physical			
Density	D792	lbs/in^3	0.0507
Specific Gravity	D792	g/cc	1.41
Water Absorption, @24 hours, 73°F	D570	%	0.22
Water Absorption, @Saturation, 73°F	D570	%	0.8
Mechanical			
Tensile Strength @ Yield, 73°F	D638	psi	8,800
Tensile Modulus	D639	psi	380,000
Elongation @ Break, 73°F	D638	%	25
Flexural Strength, 73°F	D790	psi	11,000
Flexural Modulus, 73°F	D790	psi	360,000
Compressive Strength	D695	psi	4,500
Izod Impact Strength, 73°F	D256	ft-lbs/in	1.0
Rockwell Hardness, 73°F	D785	M Scale	86
Wear Factor Against Steel, 40 psi, 50 fpm	D3702	$in^3/hr \times 1/PV$	65×10^{-10}
Dynamic Coefficient of Friction, 40 psi, 50 fpm	D3702		0.21
Thermal			
Heat Deflection Temperature @ 66 psi	D648	°F	316
Heat Deflection Temperature @ 264 psi	D648	°F	230
Coefficient of Linear Thermal Expansion	D696	in/in/°F	4.7×10^{-5}
Maximum Servicing Temperature, Intermittent		°F	285
Maximum Servicing Temperature, Long Term	UL746B	°F	195
Melting Point	D2133	°F	329
Flammability	UL94		HB
Electrical			
Volume Resistivity	D257	ohm-cm	10^{14}
Dielectric Strength	D149	V/mil	500
Dielectric Constant, @ 60 Hz, 73°F, 50% RH	D150		3.7
Dissipation Factor, @ 60 HZ, 73°F	D150		0.001

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.

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