

# TECAFORM® FG BLUE

TECAFORM®FG BLUE is Ensinger's new blue colored acetal designed specifically for the food industry. TECAFORM®FG BLUE is resistant to hot water, and typical cleaning

chemicals, and it possesses good bearing and wear properties. It's blue color makes it more visible than standard grades. TECAFORM®FG BLUE 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**
- **Resistance to food industry cleaning chemicals**  
TECAFORM®FG BLUE is resistant to aqueous solutions with pH values ranging from 4 to 14.
- **Good wear and abrasion properties**
- **TECAFORM® FG BLUE is manufactured from resin and color components that are FDA, USDA, and 3A Dairy compliant**
- **Good dimensional stability**
- **Good property retention at elevated temperatures**

*TECAFORM®FG BLUE is used in a wide variety of food industry applications requiring good strength and toughness, dimensional stability, wear resistance and the ability to operate in a wet environment with little absorption. Material handling, filling and bottling equipment are some of the common machines utilizing TECAFORM®FG BLUE's combination of properties. Typical applications are gears, wear strips, bushings, pump parts, fittings and rollers.*

# TYPICAL PROPERTY VALUES

	PROPERTIES	ASTM Test Method	Units	TECAFORM™ FG Blue
<b>PHYSICAL</b>	Density	D792	lbs/in <sup>3</sup>	0.0507
	Specific Gravity	D792	g/cc	1.41
	Water Absorption @ 24 hours, 73°F	D570	%	0.22
	@ Saturation, 73°F	D570	%	0.8
<b>MECHANICAL</b>	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
	Shore Hardness	-	D Scale	-
	Wear Factor Against Steel, 40 psi, 50 fpm	D3702	$\frac{\text{in}^3}{\text{hr}} \times \frac{1}{\text{PV}}$	$65 \times 10^{-10}$
	Static Coefficient of Friction	D3702	-	-
Dynamic Coefficient of Friction, 40 psi, 50 fpm	D3702	-	0.21	
<b>THERMAL</b>	Heat Deflection Temperature @ 66 psi	D 648	°F	316
	@ 264 PSI	D648	°F	230
	Coefficient of Linear Thermal Expansion	D696	in/in/°F	$4.7 \times 10^{-5}$
	Maximum Servicing Temperature, Intermittent	-	°F	285
	Long Term	UL746B	°F	195
	Specific Heat	-	BTU/lb-°F	-
	Thermal conductivity	-	-	-
	Vicat Softening Point	-	°F	-
	Melting Point	D2133	°F	329
Flammability	UL94		HB	
<b>ELECTRICAL</b>	Surface Resistivity	D257		-
	Volume Resistivity	D257	ohm/square	$1.0 \times 10^{-14}$
	Dielectric Strength	D149	ohm-cm	500
	Dielectric Constant, @ 60 Hz, 70°F, 50% RH	D150	V/mil	3.7
	@ 1 MHz	D150	-	-
	@ 20 GHz	D150	-	-
	@ 30 GHz	D150	-	-
	Dielectric Loss Factor @ 60 Hz, 70°	D150	-	0.001

This information is only to assist and advise you on current technical knowledge and is given without obligation or liability. All trade and patent rights should be observed. All rights reserved. Data obtained from extruded shapes material. TECAFORM™FG BLUE – Ensinger Industries, Inc. **Enginger Medical Materials** are not suitable for medical or dental implants, except for Tecapeek® Classic, which may be used for up to 30 day temporary contact.

**MATERIAL AVAILABILITY – Custom ordered - minimums apply**

**Rods:** Diameters: Up to 4-3/4", 10' length  
Length 5" and greater, 5' length

**Plates:** 1/4" to 2" thickness inclusive are 2' x 4'  
2-1/4" to 4' thickness inclusive are 2' x 4'

**Primary Specification (Resin) (Typical)**

ASTM-D-6778 POM0211

**Shapes Specification (Typical)**

ASTM-D-6100 S-POM0211

**Profiles, tubes, and special sizes are custom-produced on request.**



DISTRIBUTED BY

**HEADQUARTERS**

365 Meadowlands Boulevard  
Washington, Pennsylvania 15301

**Telephone:** 800-243-3221 Sales  
800-869-4029 Technical

**Fax:** 724-746-9209

e-mail: sales@ensinger-ind.com

