

TECAFORM® AH FG blue - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue

Density

1.41 g/cm³

Main features

- food grade blue
- low moisture absorption
- easily machinable to tight tolerance
- good mechanical properties
- good wear properties
- porosity free

Target Industries

- food processing
- food technology
- food engineering
- packaging and paper machinery
- conveyor technology
- engineering for beverage filling systems
- pharmaceutical industry

Mechanical properties	condition	value	unit	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	250,000	psi	ASTM D 638	(1) Data obtained from public source
Tensile strength at yield	@ 73 °F	8,800	psi	ASTM D 638	(2) Data obtained from public source
Tensile strength at break	@ 73 °F	9,700	psi	ASTM D 638	(3) Data obtained from public source
Elongation at yield (tensile test)	@ 73 °F	9	%	ASTM D 638	(4) Injection molded data
Elongation at break (tensile test)	@ 73 °F	25	%	ASTM D 638	(5) Injection molded data
Flexural strength	@ 73 °F	12,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	400,000	psi	ASTM D 790	
Compression strength	@ 73 °F, 1% strain	1,200	psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	11,500	psi	ASTM D 695	(3)
Impact strength (Izod)	@ 73 °F	1.1	ft-lbs/in	ASTM D 256	
Rockwell hardness	M Scale	86		ASTM D 785	
Coefficient of friction	Dynamic, 40 psi, 50 fpm	0.21	%	ASTM D 3702	(4)
Wear rate	Against Steel, 40 psi, 50 fpm	65*10 ⁻¹⁰	in ³ -min/ft-lbs-hr	ASTM D 3702	(5)
Thermal properties	condition	value	unit	test method	comment
Melting temperature		329	°F	-	(1) publicly sourced data
Deflection temperature	@ 66 psi	316	°F	ASTM D 648	(2) publicly sourced data
Deflection temperature	@ 264 psi	230	°F	ASTM D 648	(3) publicly sourced data
Service temperature	Intermittent	285	°F	-	(4) publicly sourced data
Service temperature	Long Term	195	°F	-	(5) publicly sourced data
Thermal expansion (CLTE)		4.7*10 ⁻⁵	in/in/°F	ASTM D 696	(6) publicly sourced data
Electrical properties	condition	value	unit	test method	comment
volume resistance		1.0*10 ⁻¹⁴	Ω*cm	ASTM D 257	(1) publicly sourced data
Dielectric strength		500	V/mil	ASTM D 149	(2) publicly sourced data
Dissipation factor	@ 60HZ, 73°F	0.001		-	(3) publicly sourced data
Dielectric loss factor	@ 60 Hz, 70°	0.001		ASTM D 150	(4) publicly sourced data
Dielectric constant	@ 60HZ, 73°F, 50% RH	3.7		ASTM D 150	(5) publicly sourced data
Other properties	condition	value	unit	test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.22	%	ASTM D 570	
Moisture absorption	@ saturation, 73 °F	0.8	%	ASTM D 570	

→ Resin specification:
ASTM D6778-06 POM0211 superseding ASTM D4181-00 POM211
Shapes specification:
ASTM D6100-11 S-POM211

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com.

Ensinger Inc. Headquarters
365 Meadowlands Boulevard
Washington, PA 15301, USA

Phone 800-243-3221 Sales
Phone 800-869-4029 Technical
Fax 724-746-9209
sales@ensingerusa.com

Date: 2016/08/04

Version: A0