

TECAFORM® AH FG blue - Stock Shapes

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

Target Industries

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

Mechanical properties	condition	value	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	380,000 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	@ 73 °F	9 %	ASTM D 638	(4) Injection molded data
Elongation at break	@ 73 °F	25 %	ASTM D 638	(5) Injection molded data
Flexural strength	@ 73 °F	11,000 psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	360,000 psi	ASTM D 790	
Compression strength	@ 73 °F	4,500 psi	ASTM D 695	
Compression modulus	@ 73 °F	334,000 psi	ASTM D 695	3)
Impact strength (Izod)	@ 73 °F	1.0 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	test method	comment
Melting temperature		329 °F	ASTM D 2133	
Deflection temperature	@ 66 psi	316 °F	ASTM D 648	
Deflection temperature	@ 264 psi	230 °F	ASTM D 648	
Service temperature	Intermittent	285 °F	-	
Service temperature	Long Term	195 °F	-	
Thermal expansion (CLTE)		4.7*10 ⁻⁵ in/in/°F	ASTM D 696	

Electrical properties	condition	value	test method	comment
Volume resistivity		1.0*10 ⁻¹⁴ Ω/square	ASTM D 257	(1) Data obtained from public source
Dielectric strength		500 Ω*cm	ASTM D 149	(2) Data obtained from public source
Dissipation factor	@ 60HZ, 73°F	0.001	-	1)
Dielectric loss factor	@ 60 Hz, 70°	0.001	ASTM D 150	
Dielectric constant	@ 60HZ, 73°F, 50% RH	3.7	ASTM D 150	2)

Other properties	condition	value	test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.22 %	ASTM D 570	(1) estimated
Moisture absorption	@ saturation, 73 °F	0.8 %	ASTM D 570	
Flammability (UL94)		HB	-	1)

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

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