

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

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue

Density

1.48 g/cm³

Fillers

detectable filler

Main features

- metal detectable
- easy to machine
- excellent mechanical properties
- good wear properties
- low moisture absorption
- good dimensional stability

Target Industries

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

<i>Mechanical properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Modulus of elasticity (tensile test)	@ 73 °F	450,000	psi	ASTM D 638	
Tensile strength at yield	@ 73 °F	9,500	psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	10	%	ASTM D 638	
Flexural strength	@ 73 °F	15,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	450,000	psi	ASTM D 790	
Compression strength	@ 73 °F, 1% strain	3,100	psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	14,000	psi	ASTM D 695	
Compression modulus		300,000	psi	ASTM D 695	
Impact strength (Izod)	@ 73 °F	0.77	ft-lbs/in	ASTM D 256	
Rockwell hardness	M Scale	91		ASTM D 785	
<i>Thermal properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Melting temperature		329	°F	ASTM D 2133	(1) publicly sourced data
Service temperature	Intermittent	285	°F	-	(2) publicly sourced data
Service temperature	Long Term	212	°F	-	(3) Injection Molded sample
Thermal expansion (CLTE)		7.7*10 ⁻⁵	in/in/°F	ASTM D 696	
<i>Electrical properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
surface resistivity		1.0*10 ¹²	Ω/square	-	
<i>Other properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Moisture absorption	@ 24 hrs, 73 °F	0.22	%	ASTM D 570	
Moisture absorption	@ saturation, 73 °F	0.65	%	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.