

DELRIN® 570 natural - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-H (Polyacetal (Homopolymer))

Colour

cream white

Density

1.56 g/cm³

Fillers

glass fibres

Main features

- very good dimensional stability
- excellent strength and stiffness
- good machinability
- very high creep resistant

Target Industries

- automotive industry
- construction industry
- fixture construction
- gear manufacturing

Mechanical properties	condition	value	unit	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	350,000	psi	ASTM D 638	
Tensile strength at yield	@ 73 °F	7,700	psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	10	%	ASTM D 638	
Flexural strength	@ 73 °F	14,500	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	650,000	psi	ASTM D 790	
Compression strength	@ 73 °F, 1% strain	1500	psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	14,500	psi	ASTM D 695	
Notched impact strength (Izod)		0.90	ft-lbs/in	ASTM D 256	
Rockwell hardness	M Scale	87		ASTM D 785	
Thermal properties	condition	value	unit	test method	comment
Melting temperature		347	°F	-	1)
Deflection temperature	@ 264 psi	311	°F	ASTM D 648	2)
Deflection temperature	@ 66 psi	329	°F	ASTM D 648	3)
Service temperature	Long Term	185	°F	-	
Service temperature	Intermittent	300	°F	-	
Thermal expansion (CLTE)		4.72*10 ⁻⁵	in/in/°F	-	
Electrical properties	condition	value	unit	test method	comment
surface resistivity	@ 73 °F	200e+15	Ω/sq	ASTM D 257	1)
Dielectric strength	@ 73 °F	452	V/mil	ASTM D 149	2)
Dielectric constant	@ 100 MHz; 73°F	3.8		ASTM D 150	3)
Other properties	condition	value	unit	test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.15	%	ASTM D 570	1)
Flammability (UL94)		HB		-	1)

→ Resin specification:

ASTM D6778-06 POM0110G20A22220 Z01 superceding ASTM D4181-00 POM110G20A29990, UM19, PM2.2, Y73, Z01

Shapes specification:

ASTM D6100 POM0100G201124442

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