

DELTRIN® Series Black - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-H (Polyacetal (Homopolymer))

Colour

black

Density

1.42 g/cm³

Main features

- good machinability
- high stiffness
- high fatigue strength
- high creep resistance
- good wear properties
- very good abrasion resistance

Target Industries

- automotive industry
- construction industry
- conveyor technology
- mechanical engineering
- electronics
- fixture construction
- home appliances
- gear manufacturing

Mechanical properties	condition	value	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	350,000 psi	ASTM D 638	(1) publicly sourced data
Tensile strength at yield		11,000 psi	ASTM D 638	
Elongation at break	@ 73 °F	40 %	ASTM D 638	
Flexural strength	@ 73 °F	14,000 psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	460,000 psi	ASTM D 790	
Compression strength	@ 73 °F, 1% strain	2,700 psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	14,000 psi	ASTM D 695	
Compression modulus	@ 73 °F	460,000 psi	ASTM D 695	
Impact strength (Izod)	@ 73 °F	1.5 ft-lbs/in	ASTM D 256	
Rockwell hardness	@ 73 °F R Scale	120	ASTM D 785	
Coefficient of friction	Dynamic 40 psi, 50 fpm	.2	ASTM D 3702	
Wear rate	40 psi, 50 fpm	55*10 ⁻¹⁰ in ³ -min/ft-lbs-hr	ASTM D 3702	1)
Thermal properties	condition	value	test method	comment
Melting temperature		347 °F	ASTM D 2133	1) (1) Injection molded sample 2) Resin data
Deflection temperature	@ 1.80 MPa	208 °F	ISO-R 75 Method A	2)
Service temperature	Intermittent	300 °F	-	
Service temperature	Long Term	185 °F	-	
Other properties	condition	value	test method	comment
Moisture absorption	@ saturation, 73 °F	.90 %	ASTM D 570	

→ Resin specification:
ASTM D6778-06 POM0111 superseding ASTM D4181-00 POM100B44330 LD25
Shapes specification:
ASTM D 6100-11 S-POM0111

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