

DELRIN® 527UV black - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-H (Polyacetal (Homopolymer))

Colour black

Density

1.41 g/cm³

Fillers

UV stabilizer

Main features

- → very good UV and weather resistance
- → improved surface hardness → good machinability
- → very good mechanical strength
- Target Industries → automotive industry
- → agricultural machinery
- → construction industry
- → solar systems

Mechanical properties	condition	value	unit	test method		comment		
Modulus of elasticity (tensile test)	@ 73 °F	420,000	psi	ASTM D 638				
Tensile strength at yield	@ 73 °F	10,300	psi	ASTM D 638		-		
Elongation at break (tensile test)	@ 73 °F	15	%	ASTM D 638		-		
Flexural strength	@ 73 °F	13,500	psi	ASTM D 790		-		
Modulus of elasticity (flexural test)	@ 73 °F	490,000	psi	ASTM D 790		-		
Impact strength (Izod)	@ 73 °F	1.25	ft-lbs/in	ASTM D 256		-		
Rockwell hardness	M Scale	89		ASTM D 785		-		
Rockwell hardness	R Scale	120		ASTM D 785				
Thermal properties	condition	value	unit	test method		comment		
Melting temperature		352	°F	-	1)	(1) Injection molded data		
Deflection temperature	@ 66 psi	325	°F	ASTM D 648	2)	 (2) Injection molded data (3) Injection molded data (4) Injection molded data (5) Injection molded data 		
Deflection temperature	@ 264 psi	198	°F	-	3)			
Service temperature	Long Term	185	°F	-	4)			
Thermal expansion (CLTE)		6.1*10 ⁻⁵	in/in/°F	-	5)			
Other properties	condition	value	unit	test method		comment		
Moisture absorption	@ 24 hrs, 73 °F	0.14	%	ASTM D 570		(1) Data obtained from public		
Flammability (UL94)		HB		-	1)	source		

→ Resin specification: ASTM D6778-06 POM0132 superseding ASTM D4181-00 POM132 Shapes specification: ASTM D6100 POM01601222434

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