

Delrin[®] AF Blend

KEY FEATURES

- Low Coefficient of Friction
- Self-Lubricating
- Maximum Unmodified Toughness
- Excellent Wear Characteristics
- Superior Load Bearing Characteristics

DESCRIPTION

DELIN[®] 100AF Blend is 13% PTFE fiber filled homopolymer acetal. It offers an improved coefficient of friction, better lubricity, and improved wear characteristics along with strength, toughness, dimensional stability and machinability than unfilled DELRIN[®]. The material's exceptional wear properties and internal lubrication serves to reduce or eliminate the need for external lubricants.

TYPICAL PROPERTY VALUES

Physical	Properties	Condition	Units	Value	ASTM Test
	Density		g/cm ³	1.5	D792
	Chemical Designation			POM-H	
	Filler			PTFE Fibres	

Mechanical	Properties	Condition	Units	Value	ASTM Test
	Tensile Modulus	@ 73 °F	PSI	310,000	D638
	Tensile Strength	@ 73 °F	PSI	8,100	D638
	Shear Strength	@ 73 °F	PSI	7,600	D638
	Elongation @ Yld	@ 73 °F	%	10.3	D638
	Elongation @ Brk	@ 73 °F	%	15	D638
	Flexural Modulus	@ 73 °F	PSI	485,000	D790
	Flexural Strength	@ 73 °F	PSI	12,700	D790
	Compressive Modulus	@ 73 °F	PSI	250,000	D695
	Compressive Strength	@ 73 °F, 10% strain	PSI	12,500	D695
	Izod (Charpy) Impact Strength	@ 73 °F	ft-lbs/in	1.00	D256
	Rockwell Hardness	@ 73 °F	M (R) Scale	79	D785
	Coefficient of Friction	Static			
	Coefficient of Friction	Dynamic, 40PSI, 50 FPM		0.7	D3702
	Wear (K) Factor	40 PSI, 50 FPM	in ³ -min/ft-lbs-hr	60	D3702
Limiting PV	10 FPM	ft-lbs/in ² -min	8,300	D3702	

Thermal	Properties	Condition	Units	Value	ASTM Test
	Heat Deflection Temperature	@ 66 PSI	°F	334	D648
	Service Temperature	Long Term	°F	185	
	Heat Deflection Temperature	@ 264 PSlw	°F	244	D648
	Service Temperature	Intermittent	°F	300	
	Thermal Expansion (CLTE)		in/in/°F	5*10 ⁻⁵	E-831
	Specific Heat		BTU/lb-°F		
Thermal Conductivity		BTU-in/hr-ft ² -°F			

Other	Properties	Condition	Units	Value	ASTM Test
	Moisture Absorption	@ 24 hrs, 73 °F	%	0.2	D570
	Moisture Absorption	@ Saturation, 73 °F	%	1	D570
	Flammability	UL 94		HB	
	Food Grade			N	
Relative Cost			\$\$\$		

• The data stated above are typical values intended for reference and comparison purposes only.
• The data should not be used as a basis for design specifications or quality control.

• The information is provided as a guide to the best of our knowledge and given without obligation or liability.
• Testing under individual application circumstances is recommended