

DELTRIN® AF BLEND

KEY FEATURES

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

DESCRIPTION

DELTRIN® 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 DELTRIN®. The material's exceptional wear properties and internal lubrication serves to reduce or eliminate the need for external lubricants.

TYPICAL PROPERTY VALUES

	Properties	Condition	Units	Value	ASTM Test
Physical	Chemical Designation			POM	
	Filler			PTFE Fibres	
	Density		g/cm ³	1.5	D792
Mechanical	Tensile Modulus	@ 73 °F	PSI	310,000	D638
	Tensile Strength @ Yld	@ 73 °F	PSI	8,100	D638
	Tensile Strength @ Brk	@ 73 °F	PSI		
	Shear Strength	@ 73 °F	PSI	7,600	D638
	Elongation @ Yld	@ 73 °F	%	10.3	D638
	Elongation @ Brk	@ 73 °F	%		
	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		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	

TYPICAL PROPERTY VALUES

	Properties	Condition	Units	Value	ASTM Test
Thermal	Vicat Softening Point		°F		
	Melting Temperature		°F	347	
	Heat Deflection Temperature	@ 66	°F	334	D648
	Heat Deflection Temperature	@ 264	°F	244	D648
	Service Temperature	Intermittent	°F	300	
	Service Temperature	Long Term	°F	185	
	Thermal Expansion (CLTE)		in/in/°F	5x10 ⁻⁵	E-831
	Specific Heat		BTU/lb-°F		
	Thermal Conductivity		BTU-in/hr-ft ² -°F		
Other	Moisture Absorption	@ 24 hrs, 73 °F	%	0.12	D570
	Moisture Absorption	@ Saturation, 73 °F	%		
	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.