

TECHNICAL DATA FOR KYNAR FLEX® 2500-20 PELLETS/ KYNAR FLEX® 2501-20 POWDER

	<u>METHOD</u>	<u>CONDITIONS</u>	<u>ENGLISH/COMMON UNITS</u>	<u>VALUE</u>
<u>PHYSICAL PROPERTIES</u>				
Specific Gravity	D792	73°F (23°C)	-	1.80 – 1.82
Refractive Index	D542	at Sodium D line, 77°F (25°C)	-	1.40
Water Absorption	D570	at 68°F (20°C) Immersion/24 hours	%	–
<u>PROCESSING CHARACTERISTICS</u>				
Melt Viscosity	D3835	450°F, 100 sec ⁻¹	poise	5,000 – 16,000
Melt Flow Rate	D1238	450°F, 27.5625 lb.	g/10 min	1 - 15
<u>THERMAL PROPERTIES</u>				
Coefficient of Linear Thermal Expansion	D696	-	10E-5/°F	8.5 - 10.8
Deflection Temperature	D648	at 264 psi (1.82 MPa)	°F (°C)	80 –100 (27 – 38)
Deflection Temperature	D648	at 66 psi (0.45 MPa)	°F (°C)	–
Melting Temperature	D3418	-	°F (°C)	242 – 257 (117 – 125)
<u>FLAMMABILITY</u>				
Limiting Oxygen Index (LOI)	D2868	-	% O ₂	42
Thermal Decomposition TGA	1% wt. loss	in air	°F (°C)	707 (375)
Thermal Decomposition TGA	1% wt. loss	in nitrogen	°F (°C)	770 (410)
Burning Rate	UL	Bulletin 94	-	V - O
<u>MECHANICAL PROPERTIES</u>				
Tensile Yield Strength	D638	73°F (23°C)	psi (MPa)	1,700 – 2,800 (12 – 19)
Tensile Break Strength	D638	73°F (23°C)	psi	2,000 – 4,500 (14 – 24)
Tensile Break Elongation	D638	73°F (23°C)	%	500 - 800
Tensile Modulus	D638	73°F (23°C)	psi (MPa)	35,000 – 55,000 (241 – 379)
Flexural Strength @ 5% Strain	D790	73°F (23°C)	psi (MPa)	1,500 – 2,500 (10 – 17)
Flexural Modulus	D790	73°F (23°C)	psi (MPa)	28,000 – 40,000 (192 – 276)
Compressive Strength	D695	73°F (23°C)	psi (MPa)	2,000 – 3,000 (14 – 20)
Impact Strength Notched Izod	D256	73°F (23°C)	ft-lb/in	No Break
Impact Strength Unnotched Izod	D256	73°F (23°C)	ft-lb/in	No Break
Hardness	D2240	73°F (23°C)	Shore D	55 - 60
<u>ELECTRICAL PROPERTIES</u>				
Volume Resistivity	D257	DC 68°F (20°C) 65% R.H.	ohm-cm	2 x 10 ¹⁴
Dielectric Constant 73°F	D150	100 Hz – 100 Hz	-	4.5 – 13.5
Dissipation Factor 73°C	D150	100 Hz	-	0.05 – 0.29

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