



**ADVANTAGE
INDUSTRIAL SOLUTIONS, INC.**
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Typical Mechanical Properties
“Advantek” Wear Pads & Pipe Cradles

Mechanical (coupon)	FR-VE	Mechanical (coupon)	FR-VE
Longitudinal Direction		Transverse Direction	
Ultimate Tensile Strength, PSI (ASTM D638)	35,000	Ultimate Tensile Strength, PSI	10,000
Ultimate Compressive Strength, PSI (ASTM D695)	35,000	Ultimate Compressive Strength, PSI	20,000
Ultimate Flexural Strength, PSI (ASTM D790)	35,000	Ultimate Flexural Strength, PSI	14,000
Tensile Modulus, PSI x 10 ⁶	3.0	Tensile Modulus, PSI x 10 ⁶	1.0
Compressive Modulus, PSI x 10 ⁶	2.5	Compressive Modulus, PSI x 10 ⁶	1.2
Flexural Modulus, PSI x 10 ⁶	2.0	Flexural Modulus, PSI x 10 ⁶	1.0
Ultimate Shear Strength, PSI	7,000	Ultimate Shear Strength, PSI	6,000
Ultimate Bearing Stress, PSI	35,000	Ultimate Bearing Stress, PSI	35,000
Izod Impact Strength, Ft.-Lbs. per inch of notch (ASTM D256) (sample thickness 1/8" except 1/4" for rod)	30	Izod Impact Strength, Ft.-Lbs. per inch of notch (ASTM D256)	5
		Barcol Hardness (ASTM D2583-75)	50
Electrical		Full Section in Bending	
Electric Strength, short term in oil, 1/8", vpm (ASTM D149)*	200	Modulus of Elasticity, PSI x 10 ⁶	3.0
Electric Strength, short term in oil, KV per inch	35	Tensile Strength, PSI	25,000
Dielectric Constant, 60 Hz. (ASTM D150)*	5.2	Compressive Strength, PSI	25,000
Dissipation Factor, 60 Hz. (ASTM D150)*	0.03	Thermal	
Arc Resistance, seconds (ASTM D495)**	120	Thermal Coefficient of Expansion, Inches/Inch/°F (ASTM D696)**	5 x 10 ⁻⁶
Fire Retardant Properties		Thermal Conductivity, BTU per Sq. Ft./Hr./°F/In. (ASTM C-177-76)	4
Flame Resistance, ign/burn, seconds (FTMS 406-2023)	75/75	Specific Heat, BTU/Lb./°F	0.28
Intermittent Flame Test, rating (HLT-15)	100	Other	
Flammability Test, average time of burning 5 seconds, average extent of burning 15mm (ASTM D635)		Density, Lbs./In. ³ (ASTM D792)	0.065
Surface Burning Characteristics, maximum (ASTM E84)	15	Specific Gravity (ASTM D792)	1.80
		Water Absorption, Max. % by weight (24 hour immersion) (ASTM D570)	.50

* Specimen tested perpendicular to laminate face. Note: 1 PSI = 6.894 K Pa, 1 Ft.-Lb./In. = 5.443 kg-m/m

** Indicates reported value measured in longitudinal direction.