

# DATA SHEET

# HT-440

Properties	Test Condition		ASTM	Values	Values	Values	Values	Values
Thickness				.031 in.	.062 in.	.125 in.	.187 in.	.500 in.
Tensile Strength		Lengthwise	D638	10,900 psi	16,300 psi	16,400 psi	16,500 psi	
		Crosswise		8,300 psi	10,600 psi	14,400 psi	13,500 psi	
Flexural Strength	Condition A	Lengthwise	D790	36,600 psi	38,600 psi	32,200 psi	27,700 psi	30,100 psi
		Crosswise		22,400 psi	30,400 psi	30,500 psi	26,800 psi	25,800 psi
	D48/50	Lengthwise		27,600 psi	30,400 psi	29,400 psi	27,100 psi	26,400 psi
		Crosswise		19,900 psi	24,600 psi	27,400 psi	26,500 psi	24,100 psi
Compressive Strength		Lengthwise	D695	n/a	11,800 psi	26,500 psi	22,400 psi	30,100 psi
		Crosswise		n/a	10,500 psi	22,000 psi	21,600 psi	25,800 psi
		Flatwise		n/a	n/a	45,000+ psi	45,000+ psi	32,500 psi
Izod Impact (notched)	Condition A	Lengthwise	D256	n/a	20.2 ft.lb./in.	18.6 ft.lb./in.	21.0 ft.lb./in.	22.1 ft.lb./in.
		Crosswise		n/a	14.9 ft.lb./in.	16.5 ft.lb./in.	17.6 ft.lb./in.	20.4 ft.lb./in.
	D48/50	Lengthwise		n/a	18.2 ft.lb./in.	16.8 ft.lb./in.	18.8 ft.lb./in.	20.7 ft.lb./in.
		Crosswise		n/a	14.3 ft.lb./in.	15.4 ft.lb./in.	16.7 ft.lb./in.	19.5 ft.lb./in.
	E48/50	Lengthwise		n/a	22.3 ft.lb./in.	19.1 ft.lb./in.	22.1 ft.lb./in.	22.5 ft.lb./in.
		Crosswise		n/a	14.2 ft.lb./in.	18.2 ft.lb./in.	20.9 ft.lb./in.	19.9 ft.lb./in.
Shear Strength	Condition A E24/250		D739	11,100 psi	14,200 psi	14,900 psi	15,300 psi	14,200 psi
							18,600 psi	
Water Absorption			D570	.54% of weight	.37% of weight	.27% of weight	.21% of weight	.11% of weight
Specific Gravity			D792	1.74	1.81	1.71	1.71	1.73
U.L. Subject 94			UL94	94HB	94HB	94HB	94HB	94HB
Dielectric Strength	In Air		D149	592 V pm				
	In Oil				564 V pm	440 V pm	307 V pm	
Dielectric Breakdown	Condition A		D149	52 kV	57 kV	63 kV	62 kV	44 kV
	D48/50			12 kV	14 kV	13 kV	17 kV	33 kV
Arc Resistance	Condition A		D495	127 seconds	136 seconds	136 seconds	144 seconds	146 seconds
	D48/50			131 seconds	131 seconds	132 seconds	132 seconds	136 seconds
Permittivity, 1MHz	Condition A		D150	3.31	4.08	4.02	4.19	
	D24/23			5.01	5.04	4.40	4.54	
Dissipation Factor, 1MHz	Condition A		D150	.025	.031	.020	.024	
	D24/23			.088	.070	.048	.048	
Permittivity, 1KHz	Condition A		D150	3.90	4.95	4.70	4.97	
	D24/23			7.44	7.10	6.00	6.59	
Dissipation Factor, 1KHz	Condition A		D150	.046	.053	.049	.059	
	D24/23			.134	.125	.154	.232	
Permittivity, 60 Hz	Condition A		D257	4.27	5.47	5.18	5.47	
	D24/23			11.1	9.34	8.33	12.36	
DissipationFactor, 60 Hz	Condition A		D257	.055	.059	.053	.050	
	D24/23			.268	.303	.376	.530	
U.L. Temperature Index	Electrical			210°C	210°C	210°C	210°C	210°C
	Mechanical			210°C	210°C	210°C	210°C	210°C
Thermal Conductivity				2.0 Btu-in/hour - square foot-° F .7 in/in ° C-10 <sup>6</sup> -5.				
Halogen Content				0%	0%	0%	0%	0%

Dimensional changes of .187" thick material after 24 hours in an oven at 250° C are as follows:

Weight 2.07% Thickness .54% Length .09% Width .08%

Standard Sheet sizes ar 36"x72", 48"x72", & 49"x97"

All values are average test results from typical production material.

No warranty is implied or guaranteed and testing is recommended for each application.



550 Mallory Way • Carson City, NV 89701

(775) 283-4400 • (800) 475-2214

www.polymerplastics.com