ENGINEERING DATA SHEET

GPO-1

HST-II

UL, Inc. has granted HST-II the highest thermal recognition ever achieved by any glass polyester laminate (U.L. File No. E81893). HST-II has a 220º C/210º C rating for 1/8" thick and heavier, and a 210º C/210º C rating for 1/32" thick up to 1/8" thick. HST-II is a high temperature polyester laminate that exhibits excellent retention of electrical and mechanical properties at elevated temperatures. Applications for HST-II can be found in high voltage transformers, D.C. motors and elsewhere when materials with high thermal indices are required. Available thicknesses - .031" - 2.00". Standard color -Brown.

Physical	**Test Method**	**Unit**	**Result**
Barcol Hardness	Barcol	Scale	52
Specific Gravity	D-792		1.62
Density, *Lbs/In* ^{3}		Lbs/Cu. In.	0.050
Water Absorption, *%*	D-229	%	0.03
UL Flammability	UL94	Class	HB
Flame Resistance, *Seconds*			
Ignition Time	D-229	Seconds	77
Burning Time	D-229	Seconds	256
Coefficient of Thermal Expansion	D-696	In./In./°C	2.9×10^{-5}
Temperature Class*	--	Degrees C	220
Mechanical			
Tensile Strength, *PSI*	D-638	PSI	13,000
Flexural Strength, *PSI*	D-790	PSI	25,000
Modulus of Elasticity in Flexure, *PSI*	D-790	PSI	1.70×10^6
Compressive Strength, *PSI*	D-695	PSI	33,000
Bond Strength, 1/2" Thickness, *PSI*	D-229	PSI	1,400
Shear Strength, *PSI*	D-732	PSI	14,000
Impact Strength, Izod Edgewise	D-256	Ft lbs/In. Notch	10.1
Electrical			
Dielectric Strength, ⊥, Short Time In Oil 1/16", *VPM*	D-149	VPM	400
Dielectric Strength, Parallel, Step-By-Step In Oil, *KV*	D-149	KV	62.0
Arc Resistance, *Seconds*	D-495	Seconds	150
Dielectric Constant @60HZ	D-150		4.20
Dissipation Factor @ 60 Hz	D-150		0.01

Unless otherwise indicated, all properties published are based on test performed on standard ASTM test samples and according to ASTM test methods. Values shown are for test samples made from production materials and they are believed to be conservative. No warranty is to be construed, however, in fabricated or molded form, parts may vary considerably from this standard test data. Where specific or unusual applications arise, test should be made on actual parts, and test procedures agreed upon between Synthane Taylor Canada LTD and the customer.