NORPLEX MICARTA
Global Thermoset Composite Solutions

NP322HT

TECHNICAL DATA BULLETIN

GRADE: NP322HT **U.L. LISTED: N**

DESCRIPTION: NP322HT is composed of a fine weave (less than 4 ounce/square yard) cotton fabric, commonly called linen, combined with phenolic resin to provide better machining than NP310. NP322HT contains molybdenum disulphide as a solid lubricant and is heat treated to stabilize the resin system and remove moisture.

TYPICAL PROPERTIES

		UNITS	VALUE		
			Thickness Tested		
			0.0625″	0.125″	0.500″
PHYSICAL PROPERTIES					
Specific Gravity *(ASTM D792)*		-			1.34
Rockwell Hardness *(ASTM D785)*	0.250″ Build-up	M Scale		100	
Moisture Absorption *(ASTM D570)*	Condition A	%		1.12	0.76
Flexural Strength *(ASTM D790)*	Condition A LW / CW	psi (Mpa)		23,400 / 21,600 (161.3) / (148.9)	22,800 / 21,000 (157.2) / (144.8)
	Condition E-1/150: T-150 LW / CW	psi (Mpa)		12,100 / 11,500 (83.4) / (79.3)	10,800 / 10,700 (74.5) / (73.8)
Tensile Strength *(ASTM D638)*	Condition A LW / CW	psi (Mpa)		16,200 / 13,500 (111.7) / (93.1)	
Izod Impact Strength *(ASTM D256)*	Condition A LW / CW	ft-lb/in (J/cm)			
	Condition E-48/50 LW / CW	ft-lb/in (J/cm)			2.16 / 2.06 (1.15) / (1.10)
Compressive Strength *(ASTM D695)*	Condition A Flatwise	psi (Mpa)			39,500 (272.3)
Bonding Strength *(ASTM D229)*	Condition A	lb (kg)			2,400 (1,088.6)
Shear Strength *(ASTM D732)*	Condition A Perpendicular	psi (Mpa)		13,100 (90.3)	13,900 (95.8)

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TYPICAL PROPERTIES (continued)

		UNITS	VALUE		
			Thickness Tested		
			0.0625″	0.125″	0.500″
THERMAL PROPERTIES					
Temperature Index [1] *(UL Bulletin 746b)*	Electrical / Mechanical	°C	130 / 130		
Coefficient of Thermal Expansion *(IPC-TM 650-2.4.24)*	X-axis / Y-axis	"/"/°C x10^{-6}		10.0 / 12.0	
Flammability Rating *(UL Bulletin 94)*	Condition A	Class	HB		
ELECTRICAL PROPERTIES					
Breakdown Voltage *(ASTM D149)*	Condition A	kVolts	30		
	Condition D-48/50	kVolts	5		

[1] This temperature is a recommendation only, and based upon experience in various applications. The maximum operating temperature is dependent upon the application and should be investigated prior to use.

This data, while believed to be accurate and based on reliable analytical methods, is for informational purposes only. The terms and conditions of the agreement under which it is sold will govern any sales of this product. Data supplied above are "typical values"; not to be considered "specification values".

It is the responsibility of the users of this information to make sure that they have the latest version of this TDB, and are urged to check with Customer Service or, preferably our web site, www.norplex-micarta.com, to determine if the information is the most current available.

Specification writers: Contact Norplex-Micarta for specification values before submission.