

NP318U

TECHNICAL DATA BULLETIN

GRADE: NP318U

NEMA GRADE: --

U. L. LISTED: N

DESCRIPTION: Post-forming canvas phenolic material. NP318U's mechanical and electrical properties are similar to NP310E. It is made from a cotton fabric weighing more than 4 ounces per square yard and having a thread count of not more than 70 threads per inch in both the warp and filler directions. The binder is a modified phenolic resin system, which permits the material to be heated, formed into a shape and cooled under restraint to hold the newly formed shape.

THICKNESS TESTED: 0.062", 0.125" & 0.250"

TYPICAL PROPERTIES

GENERAL PHYSICAL PROPERTIES		UNITS	0.062"	0.125"	0.250"
Specific Gravity		-			1.35
Rockwell Hardness (0.062")		M Scale	90		
Moisture Absorption (0.062") Condition Di-24/23		%	4.80	3.60	2.80
Flexural Strength (0.062") Condition A	LW / CW	psi	20,800 / 18,200	19,300 / 17,200	18,500 / 16,300
Tensile Strength (0.125") Condition A	LW / CW	psi	9,000 / 7,700	9,600 / 9,000	10,500 / 10,000
Izod Impact Strength (0.500") Condition E-48/50	LW / CW	ft-lb/in notched	-/-	5.1 / 2.9	4.4 / 2.7
Compressive Strength (0.500") Condition A	Flatwise	psi	34,500	36,000	38,500
Max Bendability	LW / CW	degrees	90 / 90	90 / 90	85 / 85
Max Spring Back	LW / CW	degrees	45 / 45	25 / 25	15 / 15
Shear Strength (0.062")	Perpendicular	psi	12,400	12,300	12,100



THERMAL & ELECTRICAL PROPERTIES	UNITS	0.062"	0.125"	0.250"
Thermal Properties				
Flammability Rating - U. L. 94 (0.062")	Class	HB		
Electrical Properties				
Parallel Breakdown Voltage ASTM D149 Condition A D-48/50	kVolts	32.0 3.6	28.4 4.0	--
Perpendicular Electric Strength ASTM D149 Condition A D-48/50	Volts/mil	270 125	205 30	--
Arc Resistance ASTM D495 Condition A	sec	125	120	--

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".

To assure the material's performance is adequate for a specific application; customers should verify, independent of Norplex-Micarta, performance characteristics of interest.

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 information is most current available.

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