

# BP18NPM TECHNICAL DATA BULLETIN

#### **GRADE: BP18NPM**

U.L. LISTED: N

DESCRIPTION: BP18NPM is a natural colored composite made from a 24 oz/sq. yd canvas which is passed through the treater twice to insure impregnation of the fibers and to obtain the resin content desired for optimal performance. The resin system is a molybdenum disulfide filled phenolic with good impregnation qualities and cured hardness. BP18NPM is specifically designed for highly loaded bearing applications, where the lubrication is provided by the molybdenum disulfide. It may have a slightly greenish tint in the finished laminate.

#### **TYPICAL PROPERTIES**

			VALUE	
		UNITS	Thickness Tested	
			0.500″	
PHYSICAL PROPERTIES				
Specific Gravity				
(ASTM D792)		-	1.40	
Rockwell Hardness				
(ASTM D785)	0.250" Build-up	M Scale	80	
Moisture Absorption	Condition A			
(ASTM D570)		%	0.08	
Flexural Strength	Condition A	psi	16,200 / 12,700	
(ASTM D790)	LW / CW	(MPa)	(111.7) / (87.6)	
Flexural Modulus	Condition A	kpsi	937 / 818	
(ASTM D790)	LW / CW	(GPa)	(6.5) / (5.6)	
Tensile Strength	Condition A	psi	10,200 / 6,300	
(ASTM D638)	LW / CW	(MPa)	(70.3) / (43.4)	
Izod Impact Strength	Condition A	ft-lb/in		
(ASTM D256)	LW / CW	(J/cm)		
	Condition E-48/50	ft-lb/in	6.00 / 2.89	
	LW / CW	(J/cm)	(3.20) / (1.54)	
Compressive Strength	Condition A	psi	34,000	
(ASTM D695)	Flatwise	(MPa)	(234.4)	
Bonding Strength	Condition A	lb	2,100	
(ASTM D229)		(kg)	(952.5)	
	Condition D-48/50	lb	2,000	
		(kg)	(907.2)	
Shear Strength	Condition A	psi	12,200	
(ASTM D732)	Perpendicular	(MPa)	(84.1)	



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### **TYPICAL PROPERTIES (continued)**

			VALUE
	UNITS	Thickness Tested	
		0.500″	
THERMAL PROPERTIES			
Temperature Index 1(UL Bulletin 746b)Electrical / Mechan	nical °C	/ 125	
Coefficient of Thermal Expansion	"/"/°C		
(IPC-TM 650-2.4.24) X-axis / Y-	-axis x10 <sup>-6</sup>	26.4 / 39.4	
Flammability Rating Condition A			
(UL Bulletin 94)	Class	HB	

<sup>1</sup> 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".

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, <u>www.norplex-micarta.com</u>, to determine if the information is the most current available.

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