

# NP342LS

## TECHNICAL DATA BULLETIN

**GRADE: NP342LS**

**U.L. LISTED: N**

**DESCRIPTION:** Fine weave canvas phenolic engineered for dimensional stability and mechanical strength at temperatures as high as 125°C. Providing excellent moisture resistance and easy to machine, NP342LS low-shrink material was designed for use in Class B generators for wedge applications and can be tested to the General Electric specification A50A341.

### TYPICAL PROPERTIES

		UNITS	VALUE		
			Thickness Tested		
			0.500"		
PHYSICAL PROPERTIES					
Specific Gravity (ASTM D792)		-	1.37		
Rockwell Hardness (ASTM D785)0.250" Build-up		M Scale	95		
Moisture Absorption (ASTM D570)	Condition A	%			
	Condition D <sub>1</sub> -24/23	%	0.58		
Flexural Strength (ASTM D790)	Condition A	psi	20,900 / 21,200		
	LW / CW	(Mpa)	(144.1) / (146.2)		
Flexural Modulus (ASTM D790)	Condition A	kpsi	1,240 / 1,190		
	LW / CW	(Gpa)	(8.5) / (8.2)		
Tensile Strength (ASTM D638)	Condition A	psi	13,200 / 14,800		
	LW / CW	(Mpa)	(91.0) / (102.0)		
Tensile Modulus	Condition A	kpsi	1,410 / 1,530		
	LW / CW	(Gpa)	(9.7) / (10.5)		
Izod Impact Strength (ASTM D256)	Condition A	ft-lb/in	2.50 / 2.90		
	LW / CW	(J/cm)	(1.33) / (1.55)		
Compressive Strength (ASTM D695)	Condition A	psi	41,000		
	Flatwise	(Mpa)	(282.7)		
Shear Strength (ASTM D732)	Condition A	psi	21,500		
	Perpendicular	(Mpa)	(148.2)		

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## TYPICAL PROPERTIES (continued)

	UNITS	VALUE		
		Thickness Tested		
		0.500"		
<b>THERMAL PROPERTIES</b>				
<b>Temperature Index</b> <sup>1</sup> (UL Bulletin 746b)      Electrical / Mechanical	°C	125 / 125		
<b>Flammability Rating</b> (UL Bulletin 94)      Condition A	Class	HB		
<b>ELECTRICAL PROPERTIES</b>				
<b>Dissipation Factor</b> @ 1 MHz (ASTM D150)      Condition A	-	0.066		
Condition D-24/23	-	0.072		
<b>Relative Permittivity</b> @ 1 MHz (ASTM D150)      Condition A	-	5.17		
Condition D-24/23	-	5.35		
<b>Breakdown Voltage</b> (ASTM D149)      Condition A	kVolts	64		

<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".

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