

DATA SHEET

LINEN BASE PHENOLIC NEMA GRADE L & LE

BASE MATERIAL	Fine-weave Cotton
RESIN	Phenolic
MILITARY SPECIFICATION	MIL-P-15035
MIL-SPEC TYPE	FBE
TENSIL STRENGTH	
Lengthwise	13,500
Crosswise	9,500
COMPREHENSIVE STRENGTH (psi)	
Flatwise	37,000
Edgewise	25,000
FLEXURAL STRENGTH, MIN FOR 1/8 -ILN SPECIMEN (psi)	
Lengthwise	15,000
Crosswise	13,500
MODULUS OF ELASTICITY, FLEXURAL	
Lengthwise	1000 m
Crosswise	850 m
SHEAR STRENGTH (psi)	11,500
IZOD IMPACT, MIN (ft-lb per in.of notch)	
Flatwise	1.3
Edgewise	1
HARDNESS, ROCKWELL (M - scale)	105
SPECIFIC GRAVITY	1.33
COEFFICIENT OF THERMAL EXPANSION (per deg C)	2×10^{-5}
WATER ABSORPTION, MAX IN 25HR (%)	
1/16 in.	1.95
1/2 in.	.7
DIELECTRIC STRENGTH, PERPENDICULAR TO lamination, shor-time test (v-mil)	
1/16 in.	500
1/8 in.	360
DISSIPATION FACTOR, MAX 1 MC, ASTM D-150, Condition A	.055
DIELECTRIC CONSTANT, MAX 1 MC, ASTM D-150, Condition A	5.8
INSULATION RESISTANCE, 96 HR, 90 PERCENT RH, 95 (megohms)	30
BONDING STRENGTH, MIN (lb)	1600
THERMAL CONDUCTIVITY (cal-cm/sec-sq cm-deg C)	7×10^{-4}
MAX. OPERATING TEMP. °F.	265
Machine Design, June 16, 1966	



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