

PHENOLIC GRADE L

Fine-Weave Cotton-Fabric Reinforced Phenolic Laminate (NEMA L)

Cotton-phenolic toughness, machined sharp.

Cotton-fabric reinforced phenolic laminate combines woven cotton cloth with a high-bond-strength phenolic resin. The result is a tough, machinable composite with excellent impact strength, low noise in gear and bearing service, and outstanding fatigue resistance under cyclic loading. A go-to material for industrial gears, bushings, rollers, and structural fixtures.

GENERAL	
Specific gravity	1.35
Water absorption 24 hours	1.04
Flammability rating	94HB

MECHANICAL	
Tensile strength	35,000 psi 240 MPa
Flexural strength LW -A 0.125"	23,000 psi 155 MPa
Compressive strength	14,000 psi 96 MPa
Bond strength	1,700 psi 11 MPa
Shear strength	13,500 psi 93 MPa
Izod impact strength at 49°C LW	1.7
M-scale hardness	105

NEMA LI 1 – C, CE, L, LE GRADES

MIL-I-24768/13-17

ROHS / REACH

APPLICATIONS

- Spacers
- Electrical insulating components
- Radio parts
- Bushings
- Rollers
- Pinions

STANDARD COLORS

Natural / Black Opaque

OPERATING ENVIRONMENT

Maximum temperature **125 °C**
255 °F