

# PHENOLIC GRADE C

## Coarse Cotton-Fabric Reinforced Phenolic Laminate (NEMA C)

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.

<b>GENERAL</b>	
Specific gravity	<b>1.35</b>
Water absorption 24 hours	<b>1.60</b>
Flammability rating	<b>94HB</b>
<b>MECHANICAL</b>	
M-scale hardness	<b>103</b>
Tensile strength	<b>37,000 psi</b> 255 MPa
Bond strength	<b>2,000 psi</b> 13 MPa
Flexural strength LW -A 0.125"	<b>22,000 psi</b> 150 MPa
Compressive strength	<b>11,200 psi</b> 77 MPa
Izod impact strength at 49°C LW	<b>1.95</b>
Shear strength	<b>14,000 psi</b> 96 MPa

NEMA LI 1 – C, CE, L, LE GRADES

MIL-I-24768/13-17

ROHS / REACH

### APPLICATIONS

- Piston rings
- Rollers
- Gears
- Pulleys
- Insulators
- Bearings and bushings

### STANDARD COLORS

Natural / Black Opaque

### OPERATING ENVIRONMENT

Maximum temperature **125 °C**  
255 °F