

## Thermal & Electrical Insulation Material Distributor

Gray

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## NEMA G9 - Industrial Laminate

Composition: Sheet Sizes: Color:

An electrical/mechanical grade of glass cloth laminate impregnated and cured with melamine resin.

Sheet sizes of 36"x48", 36"x72", 48"x48", 48"x96" and 48"x108" in thicknesses: .031" to 4"

Cut and fabricated to shape.

## **Advantages:**

NEMA G9 is similar to G5, but it can be used in high humidity applications. It has high mechanical strength and excellent electrical properties including high arc and heat resistance. It is also self extinguishing. It is used in the electrical industry in switch board panels, arc barriers, circuit breakers and as structural electrical parts both under regular and high humidity situations.

## **Specifications:**

Density  $124 \, \text{lbs/ft}^3 - 0.72 \, \text{lbs/in}^3$ 

Maximum operating temperature electrical Not recommended at elevated temperatures

mechanical 284°F (140°C)

Water absorption 0.2%
Hardness (Rockwell M) 120
Compression strength 65,000 psi

Tensile strength 55,000 psi
Flexural strength 75,000 psi
Impact strength – Izod edgewise with grain 13.0 ft-lb/in

Dielectric strength 450 volts/mil

Dielectric constant (@  $10^6$  cycles per second) 7.2 Volume resistivity 1.5 x  $10^7$  megohm-cm

Arc resistance 180 sec

Surface resistivity  $1.5 \times 10^7$  megohms

Parallel dielectric 70kv