



**SmithLamina™**

**GPO3**

SmithLamina® - GPO3 is a mineral filled, continuous strand fiberglass-mat-reinforced thermoset unsaturated polyester material.

SmithLamina® - GPO3 exhibits High Flame Resistant, Flame Rating, Combines High Arc and Track Resistance and Asbestos – Free. It is an easily fabricated laminate that exhibits excellent flame resistance. GPO3 is mainly used in the transit industry, where smoke generation and smoke toxicity are of primary concern. It is also recommended for switchgear, connectors and control panels.

**Arc Stack Assembly and Flyback Transformer**

It has exceptional flame resistance, arc resistance and a high temperature capability for applications such as fly back transformers and arc stack assemblies.

**Key Characteristics:**

Grade: NEMA LI-1 Grade GPO3 / IEC 60893 UPGM 203

Standard Colour: Red / White

Specific Density: 1.80 Gm/cm<sup>3</sup>

Thickness:

**TECHNICAL DATA**

Properties	Unit	Typical Values
Standard Colour		White(Red)
Tensile Strength	Psi	8,400
Tensile Modulus	Psi x 10 <sup>6</sup>	1.8
Flexural Strength	Psi	24,600
Flexural Strength 130° C	Psi	8470
Compressive Strength	Psi	31,200
Shear Strength	Psi	12,000
Specific Gravity		1.83
Water Absorption	% by wt.	0.2
IZOD Impact Strength (notched)	ft.lb./in.	8.9
Electrical Strength, Perpendicular	Vpm	425
Arc Resistance	Sec	181
IEC Track Resistance	V.	>500
Insulation Resistance	Ohm x 10 <sup>12</sup>	823
Co-efficient of thermal expansion	In/In/°C x 10 <sup>-5</sup>	2
Electrical temperature -	°C	120
Mechanical Temperature -	°C	140

All values are attributes of the used raw materials.

The physical data contained in this table are typical values. They are obtained on test specimens under specific conditions and represent average values of a large number of tests. The results obtained on these tests specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping.