

Date Generated: 17.05.24

## GPO3 Product Data Sheet

### Material Details

<b>Grade:</b>	GPO3. (Type: Composite / Specialist / Other Grades)
<b>Description:</b>	Polyester Glass. Polyester Glass Mat (PGM) (Not manufactured by The Attwater Group)
<b>Comments:</b>	Attamat GPO3 is a PGM composite sheet produced from glass mat and polyester resin. The sheet is an equivalent of NEMA GPO3 (flame retardant and anti tracking grade.) GPO3 exhibits an excellent combination of high strength, good flame resistance, which makes the product an ideal choice in many applications.
<b>Body Colour:</b>	Red (White on request)
<b>Cover Colour:</b>	Red (White on request)
<b>Standard Finish:</b>	Mat
<b>Size:</b>	2800 x 1200 other sizes available Thickness Range: 2.0 - 80.0 †

### Typical Applications

- Transformer Spacers
- Track Resistance
- Terminal Boards and Tag Strips
- Switchgear Manufacture
- Switchgear Link Bars
- Punched Components
- Phase Barriers
- Mechanical Applications
- Insulating Bushes Spacers Sleeves
- High Voltage Insulation
- High Voltage (Oil submerged)
- High Temperature Components
- Flame Retardant Applications
- Chemical Resistance Components
- Busbar Supports

### General Properties

Property	Unit of measure	Typical Value
Density	g/cm <sup>3</sup>	2.0
Water Absorption	mg	max. 55
Flammability Category (?4mm) †	-	UL94V0

† Where relevant, the flammability test method is used solely to control and monitor consistency of production. Under no conditions should the results be considered in relation to fire hazards under actual conditions of use.

## Electrical Properties

Property	Unit of measure	Typical Value
Breakdown Voltage (Edge Step by Step)	kV	75
Electric Strength (Flat)	kV/mm	12
Tracking Index	V	600
IR (24hrs water immersed)	M $\Omega$	500

## Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	150
Compressive Strength (perpendicular to laminations)	MPa	300
Tensile Strength	MPa	100
Impact (Notched Charpy Method)	kJ/m <sup>2</sup>	40

## Thermal Properties

Property	Unit of measure	Typical Value
Thermal Rating Continuous	°C	120
Coefficient Linear Expansion	°C	20

## Notes

- Datasheet Issue No. 3

Disclaimer: The above values are based upon routine test data and do not form the basis of a supply contract. These products may be used in a diverse range of applications and whilst every effort is made to ensure the information in this data sheet is accurate, it must be stressed that it is the user's responsibility to ensure suitability for the intended end use.

Source: <https://www.attwater.com/products/gpo3/>