

P2 Paper Phenolic Laminate Technical Data Sheet

Material Details

Grade:	P2
Description:	Phenolic Paper. Electrical grade. Designed for immersion in oil.
Comments:	Designed for oil immersed and medium voltage applications. Better oil absorption than grade P1. Good electrical and mechanical properties. Water absorption intermediate better than P1.
Specifications:	BSEN60893-3-4-PFCP203 (Which supersedes BS2572 P2). The closest NEMA equivalent to this specification is NEMA XX
Body Colour:	Brown
Cover Colour:	Sepia Brown
Finish:	Satin/Glossy
Size:	2440mm x 1220mm, 1220mm x 1220mm Thickness Range: 0.8mm-75.0mm

Typical Applications

- Busbar Supports
- Coil Formers
- High Voltage Insulation
- Mechanical Applications
- Pipeline Insulation
- Precision Machined Parts
- Terminal Boards and Tag Strips

General Properties

Property	Unit of measure	Typical Value
Density	g/cm ³	1.35
Water Absorption	mg	75
Flammability Category	-----	FH1

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
IR (24hrs Water Immersed)	G Ω	1.5
IR (Dry)	G Ω	1.5
Electric Strength (Flat Rapid)	MV/m	5.1
Breakdown Voltage (Edge Step by Step)	kV	21
Relative Permittivity @ 1 MHz	-----	5.2
Dissipation Factor @ 1 MHz	-----	0.04
Tracking Index	V	110

Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	170
Tensile Strength	MPa	105
Impact (Notched CHARPY)	kJ/m ²	4

Thermal Properties

Property	Unit of measure	Typical Value
Thermal Rating Continuous	°C	105
Thermal Rating Intermittent	°C	120

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.