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## B1 Product Data Sheet

### Material Details

Grade:	B1. (Type: Paper Based Laminates - SRBP)
Description:	Phenolic Paper. Electrical Grade SRBP
Comments:	This grade was originally produced to meet the requirements of MOD (Navy DG Ships) It has excellent electrical strength both in air and immersed in oil and good mechanical properties, low water absorption and high Insulation resistance. Used in high and medium voltage applications including switchgear, terminal panels bus bar supports.
Specifications:	BSEN60893-3-4-PFCP206 (Which supersedes BS2572 P3). The closest NEMA equivalent to this specification is NEMA XXX.
Body Colour:	Brown
Cover Colour:	Sepia Brown
Standard Finish:	Satin/Glossy
Size:	1220 x 1220 Thickness Range: 0.8 - 75.0 †

### Typical Applications

- Track Resistance
- Terminal Boards and Tag Strips
- Precision Machined Parts
- Pipeline Insulation
- Mechanical Applications
- Insulating Handles
- Insulating Bushes Spacers Sleeves
- High Voltage Insulation
- Electromagnetic Coil Insulation
- Coil Formers
- Busbar Supports

### General Properties

Property	Unit of measure	Typical Value
Density	g/cm3	1.37
Water Absorption	mg	70
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 □	6
Electric Strength (Flat Rapid)	MV/m	14
Electric Strength (Flat Step by Step)	MV/m	8.2
Breakdown Voltage (Edge Step by Step)	kV	60
Relative Permittivity @ 1 MHz	-	5
Dissipation Factor @ 1 MHz	-	0.035
Tracking Index	V	110

### Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	190
Tensile Strength	MPa	100
Impact (Notched CHARPY)	kJ/m2	3.5

### Thermal Properties

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

### Notes

- Datasheet Issue No. 1

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/b1/>