

**GENERAL DESCRIPTION**

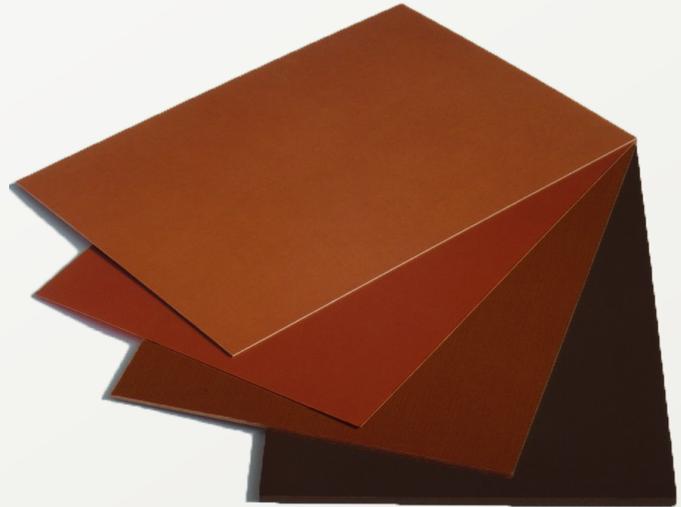
Paper Bakelite P1 is a phenolic paper rigid laminate for use as a general purpose mechanical grade material, where electrical properties are secondary. It has the highest mechanical strength of the paper-phenolic materials. It has poor electrical properties under normal humidity.

**FEATURES & BENEFITS**

- Excellent mechanical strength
- High impact strength
- Good machinability

**APPLICATIONS**

- Mechanical applications where electrical requirements are secondary
- Low voltage applications
- Suited to dry environments - discretion should be used in high humidity or moisture environments



**GENERAL INFORMATION**

Material	Electrical Grade Paper Bonded with Phenolic Resin
Colour	Brown, Black

TECHNICAL DATA	UNITS	VALUE
Density	g/cm <sup>3</sup>	1.3 to 1.4
Flexural Strength	MPa	120
Insulation Resistance after impregnation in water (D-24/23)	MΩ	10.0
Dielectric strength at 90±2°C in transformer oil perpendicular to laminations (thickness 1mm)	kV/mm	12.1
Breakdown voltage at 90±2°C in transformer oil parallel to laminations	kV	20
Permittivity (1 MHz)	-	5.5
Dissipation Factor (1 MHz)	-	0.05
Water Absorption (D-24/23, thickness 1.6mm)	mg	230

**DIMENSIONS**

Sheet	Length x Width	mm	1220 x 2470 1020 x 2040
	Thickness	mm	0.8 to 57.0
Tolerances	According to IEC or NEMA standards		

**SIZING & AVAILABILITY**

The above table shows the most commonly requested products in this range. Should you require something outside of these parameters, please contact your local sales representative or our customer service team.

**MACHINING & FABRICATION**

Insulect's manufacturing capabilities form a key part of the trusted service we offer our customers. Our two modern, well equipped facilities – in Brisbane and Melbourne – work with a wide range of electrical, thermal and mechanical materials – including plastics, composites and cellulose-based products. We offer short run, specialty or volume based machining and fabrication for almost any application and can produce cut-to-order sheets or finished components. Coupled with our highly-trained and experienced team, we are able to deliver on the most complex of customer requirements.