

GENERAL DESCRIPTION

Paper Bakelite P3 is a phenolic paper rigid laminate, suited to both mechanical and electrical applications. P3 has the best electrical properties of the paper phenolics, including high dielectric strength.

FEATURES & BENEFITS

- Good mechanical strength
- High dielectric strength in transformer oil
- Low loss factor
- Good machinability

APPLICATIONS

- Mechanical and electrical applications
- High voltage applications
- Tap switches



GENERAL INFORMATION

Material	Electrical Grade Paper Bonded with Phenolic Resin
Colour	Brown

TECHNICAL DATA	UNITS	VALUE
Density	g/cm ³	1.28 to 1.4
Flexural Strength	MPa	98
Insulation Resistance after impregnation in water (D-24/23)	MΩ	-
Dielectric strength at 90±2°C in transformer oil perpendicular to laminations (thickness 1mm)	kV/mm	70
Breakdown voltage at 90±2°C in transformer oil parallel to laminations	kV	30
Permittivity (1 MHz)	-	6.0
Dissipation Factor (48-62 MHz)	-	0.045
Water Absorption (D-24/23, thickness 1.6mm)	mg	182

DIMENSIONS

Sheet	Length x Width	mm	1220 x 2440 1300 x 3050
	Thickness	mm	3.0 to 25.0
Rod	Length	mm	1000
	Diameter	mm	19
Tube	Length	mm	1000
	Outer Diameter	mm	12.7 to 37.0
	Inner Diameter	mm	10.5 to 31.67
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.