

Rigid Insulation

Fabric Bakelite F1 & F3

GENERAL INFORMATION:

These are laminated sheets made from layers of woven cotton fabric using thermo-setting synthetic resin as the bonding medium. These are graded according to coarseness of cloth (threads/mm²).

F1 BAKELITE

F1 is a fine weave grade with excellent machinability and mechanical strength. It has a very good strength-to-weight ratio.

APPLICATIONS

Shuttles, gears, pulleys, automobile couplings, structural parts, spindles, machine tool gibs/slideways, low-voltage contact breaker, friction plates etc.

F3 BAKELITE

F3 is a general-purpose grade of fabric Bakelite with good machinability and mechanical strength in addition it has high impact resistance, good mechanical strength and adequate machinability.

APPLICATIONS

Heavy duty gears, pulleys, piling dolly, workbench tops, rolling mill bearings, etc.

PROPERTIES:

Fabric Phenolic Bakelite	Standard	IS 2036-1995	
	UNITS	F1	F3
Tensile strength (min)	kgf/cm ²	700	525
Flexural strength (min)	kgf/cm ²	1200	980
Shear strength (min)	kg f/cm ²	630	525
Impact strength (min) charpy	Kj/m ²	6.0	8.8
Compressive strength (min)	Kgf/cm ²	2040	2040
Electric Strength			
Flatwise for 1.6mm and below	kV	2	NA
Edgewise	kV	NA	1
Insulation Resistance (min)	MΩ	1	1
Water Absorption of 1.6mm (max)	Mg	201 (for 0.8mm)	504 (for >25mm)
Punchability (Typical temp. thickness limited)	°C mm (max)	100° - 120° 2.5	NA
Temperature Index	0°C	110	110
Physical Properties			
Colour	Natural (Brown) and Black (Graphite Impregnated)		
Standard Thicknesses	0.8mm to 75mm		
Sheet Size	2440mm x 1220mm		
Note: F3 grade is also available in tubes from 4.75mm I.D. up to 250mm O.D. with lengths up to 915mm long.			