



Bakelite Paper

GENERAL INFORMATION:

Commonly referred to as Bakelite because the resin Bakelite was developed in 1904 and used extensively for moldings and also electrical insulating applications.

Laminated sheets of paper with a synthetic resin formed into a dense laminate.

Characteristics, from low to high voltage insulation properties.

APPLICATIONS:

TP1: Standard grade

TP2: Economical products versus TP3, with lower properties than TP3.

TP3: Low loss factor, High dielectrically strength, suitable to be used in transformer oil

TYPICAL PROPERTIES:

Properties	Unit	Values		
		TP1	TP2	TP3
Flexural strength perpendicular to laminations	MPa	120	90	98
Bonding strength (10 mm in thickness)	N	3200	3000	4500
Insulation resistance after impregnated in water(D-24/23)		1.0×10^7	--	1.0×10^2
Dielectric strength perpendicular to laminations(in 90 ± 2 transformer oil, 1mm in thickness)	MV/m	12.1	14	70
Breakdown voltage parallel to laminations (in 90 ± 2 transformer oil)	KV	20	12	30
Permittivity(1MHz)		5.5		6.0
Dissipation factor (48-62 MHz)				0.045
Dissipation factor (1 MHz)		0.05		
Density	g/cm ³	1.3-1.4	1.3-1.45	1.28-1.4
Water absorption (D-24/23, 1.6 mm in thickness)	mg	182		
Color		Natural, black	chocolate	chocolate
Reference standard		JB/T8149.1-2000		
Sheet Size		1220 × 1020,1980x980,1220 x 2470mm		
Tolerances		As IEC or NEMA standards		