



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS
 INSULATING COMPONENTS FOR
 POWER SYSTEMS EQUIPMENT

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MATERIAL DATA SHEET

Item: Diamond Coated Kraft Paper

Description: This specification covers thermally upgraded electrical grade kraft paper coated with a B-stage heat curable epoxy resin. The base paper is made from selected grades of purified 100% sulfate, virgin kraft pulp, unbleached and without sizing. The epoxy adhesive is applied to either one or two sides of the paper in either a solid pad or diamond pattern. The diamond pattern consists of 3/8" (9.5mm x 9.5mm) with 5/8" (15.9mm) centers spacing.

Chemical Properties:

Ash Content, 1% max. — All calipers

Moisture Content, 8% max, 4-7% average. The moisture content shall be high enough to withstand bends and creasing but low enough to prevent wrinkling and elongation.

PH Value, 6 to 8% max. — All calipers

Nitrogen, 1.3 to 2.0% — All calipers

Key Characteristics:	Units – English (SI)	.003 in. (.076 mm)	.005 in. (.127 mm)	.007 in. (.178 mm)	.010 in. (.254 mm)	.015 in. (.381 mm)	.020 in. (.508 mm)
Tensile Strength: MD	grams	45	85	100	160	200	250
CMD	grams	15	20	25	40	80	120
Burst Strength	Lbs/sq.in.	45	90	120	175	275	330
Dielectric Breakdown	Volts	900	1300	1700	2100	3000	3300
Burst Strength, kilovolts	Lbs/sq.in.	5.5	8.5	10.5	14.0	20.5	23.5
Bond Strength		Minimum 40 psi shear strength, tested at 210°F (100°C)					

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