

Daimon Dotted Paper

Insulating Paper



Description

Diamond pattern paper made of Kraft paper coated with heat curable epoxy resin. The epoxy adhesive is applied to both sides of the paper in a diamond pattern consisting of 9.5mm x 9.5mm diamonds with 15.9mm center spacing.

The Diamond dotted Paper is to be used in oil-immersed transformers for the insulation between of coils. On the insulation layer, there is a layer dotted epoxy resin that will be changed with high temperature change that is to be called as felt. It is a kind of material with inertia, dry and no conglutination at normal temperature (below 30°C).

The Diamond Dotted Paper (DDP) will make the electric conductor forever felt up as a hard unit under the high temperature by its internal latency substance.

When the temperature is rising up to 90°C, The Diamond Pattern Paper (DDP) begins one-off thaw and then one-off solidification. When to keep the temperature at 90°C for 90 minutes, the epoxy resin would paste on neighboring cable and paper safely. The felt intensity is as high as to 70 psl at 100°C.

(The value at least is equal to 0.450Mpa) (IEC standard)

Material Name

Diamond Pattern Paper, Diamond Dotted Insulating Presspaper, Diamond Dotted Paper, Ddp, Double Sided, Diamond Pattern Paper, Ddpp, Dprcp, Diamond Pattern Resin Coated Paper, Varnished Paper Epoxy, Adhesive Diamond Paper, Etc.

Typical Values

Specifications							
Thickness	inch	0.003	0.005	0.007	0.010	0.015	0.020
	mm	0.08	0.13	0.18	0.25	0.38	0.50
Thickness tolerance \pm mm (\pm 10%)		0.005	0.013	0.018	0.025	0.038	0.05
Width (mm)		500,625,810,960,1000,1100,1219,1300 We also can produce Width of DDP according to customer's requirements					
Width tolerance (mm)		\pm 5, all thicknesses					
Reel Diameter (mm)		300-360					
Can Core Diameter (mm)		76 \pm 2					
Apparent density (g/cm ³)		0.9 to 1.1, all thicknesses					
Moisture content (%)		6.0 to 10.0, all thicknesses					
PH of Aqueous Extract		6.0 to 8.0, all thicknesses					
Ash content (%)		1% maximum					
Elongation MD (%)		4					
CMD (%)		9					
No-pollution oil of transformer		Non-pollution					
Coating thickness per side (mm)		0.006 to 0.012					
Tear strength (g)	Machine direction	55	100	140	220	410	440
	Cross machine direction	70	145	210	370	600	700
Tensile strength (N/mm ²)	Machine direction	90	90	80	90	92	95
	Cross machine direction	30	25	35	35	35	35
Mullen burst strength: min (Psi)		40	65	90	150	200	300
Dielectric breakdown (volts/layer, dry test)		750	1300	1700	2100	3000	3300
Dielectric breakdown (kilovolts/layer, oil test)		5.5	8.5	10.5	14.0	20.0	23.5
Bond strength (Psi)		Minimum 40 (tested at 100 degrees)					
Kpa		450					