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| <b>COORDINACIÓN DE PRODUCCIÓN</b>   | Elaborado por: CSGC |
|                                     | Revisado por: JFA   |
|                                     | Aprobado por: GE    |
| <b>FICHA TÉCNICA PAPEL WEIDAMNN</b> | Página 1 de 2       |



## 1. DETAILED PRODUCT DESCRIPTION

Specifications

- 1.High purity and mechanical strength
- 2.Good compatibility with liquid dielectric
- 3.Color natural
- 4.100% sulphate pulp

## 2. DESCRIPTION

Diamond dotted insulation paper is made of electrical insulating 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 It is a kind of material with inertia, dry and no conglutination at normal temperature (below 30 degree C). The Diamond Dotted Paper 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 degree C. The Diamond Paper begins one-off thaw and then one-off solidification.

When to keep the temperature at 90 degree C for 90 minutes, the epoxy resin would paste on neighboring cable and paper safely. The felt intensity is as high as to 70psi at 100 degree C (The value at least is equal to 0.275Mpa, America standard).

## 3. FEATURES

- Insulation class A (105 °C) according to according to IEC 641 Kraft paper, 100% sulphate Pulp
- High purity and mechanical strength Color natural
- Baked enamel coating: Epoxy resin , rhombic, one or both sides
- Good compatibility with liquid dielectric after the baked enamel coating has hardened.
- Care should be taken that the that the layers to be baked remain closely pressed against each other during baking time

## 4. APPLICATIONS

It 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.

## DATA SPECIFICATION

| No. | ITEM                           |                 | UNIT              | VALUE                                  |                |                |                |                |
|-----|--------------------------------|-----------------|-------------------|--|----------------|----------------|----------------|----------------|
| 1   | Thickness & error              |                 | mm                | 0.08 ±<br>0.005                        | 0.13±<br>0.007 | 0.18 ±<br>0.01 | 0.20 ±<br>0.01 | 0.25 ±<br>0.01 |
| 2   | Density                        |                 | g/cm <sup>3</sup> | 0.85 – 1.10                            |                |                |                |                |
| 3   | Single fase adhesive thickness |                 | um                | 10-15                                  |                |                |                |                |
| 4   | Moisture                       |                 | %                 | 4.0 8.0                                |                |                |                |                |
| 5   | Oil abdorption                 |                 | %                 | ≥ 20                                   |                |                |                |                |
| 6   | Adhesion strenght              | Normal          | kPa               | ≥ 650                                  |                |                |                |                |
|     |                                | 100 °C ±<br>2°C |                   | ≥ 400                                  |                |                |                |                |
| 7   | Pollution to transformer       |                 |                   | No pollution ( $\Delta \tan < 0.001$ ) |                |                |                |                |
| 8   | Tensile strength               | MD              | N/10mm            | ≥ 60                                   | ≥ 110          | ≥ 160          | ≥ 180          | ≥ 230          |
|     |                                | CD              |                   | ≥ 30                                   | ≥ 50           | ≥ 70           | ≥ 80           | ≥ 100          |
| 9   | Tear strength                  | MD              | m N               | ≥ 450                                  | ≥ 900          | ≥ 1350         | ≥ 1500         | ≥ 2000         |
|     |                                | CD              |                   | ≥ 500                                  | ≥ 1000         | ≥ 1500         | ≥ 1700         | ≥ 2300         |
| 10  | Arc resistance                 | In air          | Kv<br>(tested)    | ≥ 0.88                                 | ≥ 1.37         | ≥ 2.00         | ≥ 2.10         | ≥ 2.25         |
|     |                                | In oil          |                   | ≥ 4.40                                 | ≥ 7.00         | ≥ 9.00         | ≥ 9.80         | ≥ 11.50        |