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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 20629.3-2019

**Non-cellulosic papers for electrical purposes -- Part 3: Unfilled
aramid (aromatic polyamide) papers**

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Foreword

GB/T 20629 "Electroless paper for electrical use" is divided into the following parts.

--- Part 1. Definitions and general requirements;

--- Part 2. Test methods;

--- Part 3. Unfilled aramid fiber paper.

This part is the third part of GB/T 20629.

This section uses the redrafting method with reference to IEC 60819-3-3.2011 "Electroless paper for electrical purposes - Part 3. Specifications for individual materials

Part 3. Unfilled aramid paper, compiled to a degree of consistency with IEC 60819-3-3.2011.

This part was proposed by China Electrical Equipment Industry Association.

This part is under the jurisdiction of the National Technical Committee for Standardization of Insulation Materials (SAC/TC51).

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1 Scope

This part of GB/T 20629 specifies the classification, requirements, test methods, inspection rules and packages of various types of unfilled aramid fiber paper.

Loading, marking, transportation and storage.

This section applies to unfilled meta-aramid fiber paper for electrical use.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

Determination of GB/T 450 paper and paperboard samples and determination of longitudinal, lateral and frontal surfaces of samples

GB/T 455 Determination of tearing of paper and paperboard

GB/T 20629.1 Non-cellulosic paper for electrical purposes - Part 1. Definitions and general requirements

GB/T 20629.2-2013 Non-cellulosic paper for electrical purposes - Part 2. Test methods

3 classification

Electrical unfilled aramid fiber paper is divided into the following three models.

---1 type. calendered paper, with good insulating oil/lacquer absorption, according to the level of electrical strength is divided into 1A type and 1B type, suitable

Used for wrapping, etc.

---2 type. calendered paper, suitable for flexible composite materials;

---3 type. non-calendered paper, with high thickness and low apparent density, suitable for phase insulation and end insulation of electrical windings, etc.

Where softness, ductility, and conformability are required.

4 requirements

All types of unfilled aramid fiber papers shall comply with the general requirements specified in GB/T 20629.1, and shall also comply with Table 1.

Specified performance requirements. When assessing whether it meets the requirements of Table 1, the sampling method used shall be in accordance with GB/T 450. In all cases,

The values given in Table 1 are the median values, and the number of samples is in accordance with GB/T 455 and GB/T 20629.2-2013.

Table 1 Performance requirements

Serial number performance unit requirements

1 thickness μm

Allowable deviation of nominal thickness median and nominal thickness

≤ 50

> 50

1A type 1B type 2 type 3 type

$\pm 15\%$

$\pm 10\%$

$\pm 15\%$

$\pm 10\%$

$\pm 15\%$

$\pm 10\%$

$\pm 20\%$

$\pm 20\%$