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

GB 7969-2003

Replacing GB/T 7969-2003, GB/T 7970-1999

Cable paper
(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document replaces GB/T 7969-2003 "Power Cable Paper" and GB/T 7970-1999 "Communication Cable Paper": This document begins with it is mainly based on GB/T 7969-2003 and integrates the contents of GB/T 7970-1999: Compared with GB/T 7969-2003, except for structural adjustment and in addition to editorial changes, the main technical changes are as follows:

- a) The scope of application of the document has been changed (see Chapter 1, Chapter 1 of GB/T 7969-2003);
- b) The classification by quality (see Chapter 3 of GB/T 7969-2003) is deleted, and the classification by thickness is added (see Chapter 4);
- c) Added requirements for cable paper with thicknesses of "50μm, 65μm, 75μm, 100μm, 125μm, 180μm and 250μm" (See Table 1);
- d) The requirements and test methods for thickness deviation have been changed (see Tables 1 and 6:3, Tables 1 and 5:4 of GB/T 7969-2003);
- e) The requirements for tightness have been changed (see Table 1, Table 1 of GB/T 7969-2003);
- f) The requirements and test methods for tensile index have been changed, and "tensile strength" has been changed to "tensile index" (see Tables 1 and 6:5, Table 1 and 5:6 of GB/T 7969-2003);
- g) The requirements and test methods for elongation have been changed (see Tables 1 and 6:5, Tables 1 and 5:7 of GB/T 7969-2003);
- h) Changed the requirements for tear index, changing "tear degree" to "tear index" (see Table 1, Table 1 of GB/T 7969-2003);

i) Changed the requirements for electrical strength and dry paper dielectric loss tangent ($\tan\delta$) (100°C) (see Table 1, GB/T 7969-2003

Table 1);

j) The requirements and test methods for pH value of water extract, conductivity and air permeability of water extract have been changed (see Tables 1, 6:9, 6:10 and 6:11, Table 1, 5:12, 5:13 and 5:14 of GB/T 7969-2003);

k) Changed the requirements for delivery moisture, changing "moisture" to "delivery moisture" (see Table 1, Table 1 of GB/T 7969-2003);

l) The requirements and test methods for folding endurance are deleted (see Tables 1 and 5:9 of GB/T 7969-2003);

m) The requirements for dimensions and dimensional deviations have been changed (see 5.2, 4:2 of GB/T 7969-2003);

n) The requirements for the number of joints have been changed (see 5.4, 4:5 of GB/T 7969-2003);

o) The inspection rules have been changed (see Chapter 7, Chapter 6 of GB/T 7969-2003);

p) The supplementary content of packaging has been deleted (see 7.2 of GB/T 7969-2003):

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

1 Scope

This document stipulates the product classification, technical requirements, inspection rules and marking, packaging, transportation and storage of cable paper, and describes the corresponding testing procedures:

test method:

This document applies to the production, inspection and sales of cables and other electrical insulation papers with rated voltages not greater than 35kV:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 450 Collection of paper and cardboard samples and measurement of longitudinal,

transverse, front and back sides of the samples GB/T 451.1 Determination of dimensions and deflection of paper and cardboard GB/T 451.3 Determination of thickness of paper and cardboard GB/T 455 Determination of tear strength of paper and cardboard GB/T 458-2008 Determination of air permeability of paper and cardboard GB/T 462 Determination of moisture content of paper, cardboard and pulp analysis samples GB/T 742 Determination of burning residue (ash) of papermaking raw materials, pulp, paper and cardboard (575°C and 900°C) GB/T 1545-2008 Determination of acidity or alkalinity of aqueous extracts of paper, cardboard and pulp GB/T 2828.1 Enumeration sampling inspection procedures Part 1: Batch-by-batch inspection sampling plan retrieved by acceptance quality limit (AQL) GB/T 3333 Test method for power frequency breakdown voltage of cable paper GB/T 3334 Cable paper dielectric loss tangent (tgdelta) test method (bridge method) GB/T 7977-2007 Determination of electrical conductivity of paper, cardboard and pulp aqueous extracts GB/T 10342 Paper packaging and marking GB/T 10739 Standard atmospheric conditions for handling and testing of paper, paperboard and pulp samples GB/T 12914 Determination of tensile strength of paper and paperboard - Constant speed tensile method (20mm/min)

3 Terms and definitions

There are no terms or definitions to be defined in this document:

4 Product categories

4.1

Cable paper is divided into low-tightness cable paper (DLZ-D) and high-tightness cable paper (DLZ-G) according to tightness:

4.2

Cable paper is divided into type I, type II and type III according to thickness: Among them, Type I includes three specifications: 50µm, 65µm, and 75µm: Type II includes it includes 4 specifications of 80µm, 100µm, 125µm and 130µm: Type III includes 4 specifications of 170µm, 180µm, 200µm and 250µm: