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

GB/T 11026.9-2016

**Electrical insulating materials -- Thermal endurance properties
-- Part 9: Instructions for calculating thermal endurance
characteristics using simplified procedures**

电气绝缘材料 耐热性 第9部分：利用简化程序计算耐热性导则

(English Translation)

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Foreword

GB/T 11026 "Electrical insulation material heat resistance" is divided into the following parts.

- Part 1. Assessment of aging procedures and test results;
- Part 2. Selection of test criteria;
- Part 3. Procedures for calculating heat - resistant characteristic parameters;
- Part 4. Aging oven Single chamber oven;
- Part 5. Precision oven with aging oven temperature up to 300 ° C;
- Part 6. Aged oven multi - chamber oven;
- Part 7. Determine the relative heat resistance index (RTE) of insulating materials;
- Part 8. Determining the heat resistance index (TI and RTE) of insulating materials with a fixed time limit method;

Part 9. Guidelines for calculating heat resistance using simplified procedures.

This part is part 9 of GB/T 11026.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the translation method equivalent to the use of IEC 60216-8.:2013 "Electrical insulation materials, heat resistance Part 8. the use of simplified procedures Guidelines for Calculating Heat Resistance "(1st edition).

And the normative reference in this part of the international standards are consistent with the relationship between China's standards are as follows.

Electrical insulation - Heat resistance and presentation method (IEC 60085.:2007, IDT);
GB/T 11021-2014;

- GB/T 11026.2-2012 Electrical insulating materials - Heat resistance - Part 2. Selection of test criteria (IEC 60216-2.:2005, IDT);

GB/T 11026.3-2006 Heat insulation of electrical insulating materials - Part 3. Procedures for calculating heat resistance characteristics (IEC 60216-3.:2002, IDT);

GB/T 11026.4-2012 Electrical insulating materials - Heat resistance - Part 4. Aging oven Single chamber oven (IEC 60216-4-1.:2006, IDT);

GB/T 11026.7-2014 Heat insulating properties of electrical insulating materials - Part 7. Determination of relative heat resistance of insulating materials (RTE) (IEC 60216-5.:2008, IDT).

This section makes the following editorial changes.

--- changed the standard name.

This part is made by China Electrical Equipment Industry Association.

This part of the National Electrical Insulation Materials and Insulation System Standardization Technical Committee (SAC/TC301) centralized.

This part of the drafting unit. Machinery Industry Beijing Institute of Technology and Economic Research Institute, Yantai Min Shi of Special Paper Co., Ltd., Jiaying City New China Electrical and Mechanical Co., Ltd., DuPont (China) R & D Management Co., Ltd., Shunde District of Foshan City, quality and technical supervision standards and coding, Shanghai Cable Research Institute, Suzhou Taihu Electric New Materials Co., Ltd., Guilin Institute of Electrical Science and Technology Co., Ltd.

1 Scope

This part of GB/T 11026 specifies general aging conditions and simplified procedures to obtain heat resistance characteristics, including temperature index (TI), phase the temperature index (RTI) and the half difference (HIC).

The procedure set forth in this section specifies the principle of assessing the heat resistance of insulating materials at high temperatures for extended periods of time.

Note 1: When using this section, there is a linear relationship between the logarithm of the time required to cause a change in the intended performance and the reciprocal of the corresponding absolute temperature (Arrhenius relationship).

NOTE 2 In order to effectively apply this part, there should be no change, especially a primary change, in the temperature range studied.

Note 3: All other parts of GB/T 11026, the term "insulating material" is used to denote "insulating

material and its simple assembly".

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 11026.1-2016 Heat insulation of electrical insulating materials - Part 1. Evaluation of aging procedures and test results (IEC 60216-1:2013, IDT) ISO 291 Standard for Plastics Adjustment and Testing (Plastics-Standard atmospheres for conditioning and testing IEC 60085 Electrical Insulation and Characterization (Electrical insulation-Thermal evaluation and designation IEC 60216-2 Electrical insulating materials - Heat resistance - Part 2. Determination of heat resistance of electrical insulating materials - Test criteria (Electrical insulating materials-Thermal endurance properties-Part 2. Determination of thermal endurance properties of electrical insulating materials-Choice of test criteria) IEC 60216-3 Electrical insulating materials - Heat resistance - Part 3. Procedures for calculating heat - resistant characteristic parameters (Electrical insulating materials-Thermal endurance properties-Part 3. Instructions for calculating thermal endurance characteristics) IEC 60216-4-1 Electrical insulating materials - Heat resistance - Part 4-1. Aging oven Single - chamber oven (Electrical insulating materials-Thermal endurance properties-Part 4-1. Ageing ovens-Single-chamber ovens) IEC 60216-5 Electrical insulating materials - Heat resistance - Part 5. Determination of relative heat resistance (RTE) of insulating materials [Electrical insulating materials-thermal endurance properties-Part 5. Determination of relative thermal endurance index (RTE) of an insulating material]

3.1 Terms and definitions

The following terms and definitions apply to this document.