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

GB/T 8411.1-2008

Replacing GB/T 8411.1-1987

**Ceramic and glass insulating materials -- Part 1: Definition and
classification**

陶瓷和玻璃绝缘材料 第1部分：定义和分类

(English Translation)

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4 Ceramics, glass, glass ceramics and glass combination of mica material classification

Foreword

GB/T 8411 "Ceramic and glass insulating materials" currently consists of the following three parts.

--- Part 1. Definitions and classification;

--- Part 2. Test methods;

--- Part 3. Material properties.

This section GB/T 8411 "ceramics and glass insulating materials," Part 1.

The partial modification using IEC 60672-1:1995 "Ceramic and glass insulating materials - Part 1. Definitions and classification" (in English).

Chapter of this part of the number, structure and standard IEC 60672-1:1995 correspond exactly.

This section uses the terminology, symbols and units with IEC 60672-1:1995 agreement.

The portion of the IEC 60672-1:1995 The main differences are.

a) Remove the IEC 60672-1:1995 Foreword;

." B) with a decimal point instead of a comma as the decimal point, "";

c) an increase in the group table 1C100 C121 subgroups and increase the relational tables note illustrated with original classification.

Increased C121 subgroup reason. C121 porcelain in strength aluminum widely used in our country, but IEC 60672 to roughly classified as C120, will produce inconvenient in actual use. Increased C121 subgroup aluminum porcelain, technical parameters corresponding to GB/T 8411.1-1987IV class Parameters porcelain.

This Part replaces GB/T 8411.1-1987 "porcelain material Part I. Definitions, classification and Performance" in the definition and classification section.

Section compared with the GB/T 8411.1-1987 The main changes are as follows.

- a) on the material type, material type IEC 60672-1 exactly from the original single standard electrical porcelain ceramic material must expand into nine categories Insulating material and glass insulating material of Class 7;
- b) The terminology and the unity of the same profession or trade, such as "thermal shock resistance", "electric strength" and so on;
- c) material classification numbers to be consistent with IEC 60672.

This part is proposed by the China Electrical Equipment Industrial Association.

The insulators in part by the National Standardization Technical Committee (SAC/TC80) centralized.

This section is responsible for drafting the Xi'an Institute of Electric porcelain, high-voltage electrical Xi'an limited liability company, the Nanjing Electric Group Co., Ltd. Company Secretary, Hunan University, Fushun Electric Porcelain Manufacturing Co., Ltd., Dalian, porcelain Ltd. drafted.

1 Scope

This section GB/T 8411 is suitable for electrically insulating ceramic, glass ceramic, glass - mica and glass materials, this section gives the term Definition, according to the chemical composition, quality characteristics and applications of different types of materials in a list by group classification.

2 Normative references

The following documents contain provisions which, through reference to GB/T 8411 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

IEC 1006:1991 of electrically insulating material a glass transition temperature measuring method.

3 Terms and Definitions

The following terms and definitions apply to this part of the GB/T 8411's.

For separating solid materials having different potential of the conductive member, and its low electrical conductivity to a negligible level.

An inorganic material before sintering, which is mainly composed of polycrystalline silicon generally contain salts, aluminosilicate and simple or complex oxides, such as Titanate. This definition also includes some non-oxide material, such as aluminum nitride.

A non-crystalline mixtures of inorganic materials, usually oxides melt, and then completely cured into a method.

Slow cooling from a high temperature to obtain a glass, as compared with the applied stress, residual thermal stress low enough to be negligible.

Prestressed glass, the surface compressive stress in the state, and the internal tensile stress in the state, the internal compressive stress in the surface layer is fully guaranteed Support under.

An insulating material piece of glass or glass powder heat-treated steel. This treatment makes the glass or glass powder to generate a large number of small crystals Body, transformed into a polycrystalline.

Made of glass combined with fine natural or synthetic mica was made of an insulating material, it can be combined with natural mica prepared directly from glass melt block was also by crystallization treatment properly formulated glass-ceramic material was obtained.