

ICS 29.035.50
CCS K 15



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

GB/T 5019.1-2009

Replacing GB/T 5020-2002

**Specification for insulating materials based on mica -- Part 1:
Definitions and general requirements**

以云母为基的绝缘材料 第1部分：定义和一般要求

(English Translation)

Issued on: June 10, 2009

Implemented on: December 1, 2009

Issued by: Standardization Administration of China

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Foreword

GB/T 5019 "with mica-based insulating materials" is divided into the following sections.

- Part 1. Definitions and general requirements;
- Part 2. Test methods;
- Part 3. Commutator separators and materials;
- Part 4. Mica paper;
- Part 5. electric equipment mica plate;
- Part 6. Polyester film reinforced B stage epoxy resin binder;
- Part 7. vacuum pressure impregnation (VPI) film reinforced with glass cloth and epoxy resin binder;
- Part 8. Glass fabric reinforcement B stage epoxy resin binder;
- Part 9. single wire wrapped with epoxy polyester film mica;
- Part 10. fire-resistant safety cables mica;
- Part 11. plastic mica plate.

This section GB/T 5019 Part 1.

This section identical with IEC 60371-1:2003 "with mica-based insulating materials - Part 1. Definitions and general requirements" (in English).

This part of IEC 60371-1:2003 Differences. Remove IEC 60371-1:2003 Foreword and Introduction.

This Part replaces GB/T 5020-2002 "is defined in the insulating material mica-based and general requirements." this section compared with GB/T 5020-2002 The main changes are

as follows.

- a) increase the "normative references";
- b) delete the definition of mica injection;
- c) increase the "soft mica after impregnation of porous materials" and "fire-resistant safety cables with a soft material mica";
- d) delete the words "molded parts." this part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee of the insulating material (SAC/TC51) centralized.

This section is drafted. Guilin Electrical Apparatus Research Institute, East wood Technology Group Co., Ltd., Suzhou Jufeng Insulation Materials Co., Ltd.

1 Scope

This section GB/T 5019 gives the mica bonding material to bond materials mica and mica paper based product definitions, general Requirements and delivery conditions.

This section applies to mica-based insulating material.

2 Normative references

The following documents contain provisions which, through reference to GB/T 5019 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.

GB/T 2900.5-2002 Electrotechnical terminology insulating solids, liquids and gases (eqv IEC 60050 (212).1990)

3 Terms and Definitions

GB/T 2900.5-2002 and the following terms and definitions apply to this section.

Kind of Complex silicate crystals, a major electric and applications of two types.

- a) muscovite (aluminum - potassium mica), rather hard;
- b) phlogopite (aluminum - magnesium - potassium mica), relatively soft.

Thick sheet of mica or mica foil peel into pieces of mica (maximum thickness typically about 30μm).

Entirely of very fine mica flake without any adhesive made of paper.

With a suitable adhesive peel mica or mica paper bonded to one or more layers of mica material, which may be with or without reinforcing materials.

4.1 Rigid flat material mica or mica paper

Mica by an adhesive under pressure with or without heat bonded rigid sheet material.

4.1.1 Commutator hard material separator

One side or both sides polished rigid mica materials.

Note: The commutator is used as an insulating spacer between the commutator segments.

4.1.2 Electric equipment used in hard materials

Rigid mica materials can be used at a predetermined temperature, usually not polished.

GB/T 5019.1-2009/IEC 60371-1:2003