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

GB/T 1303.1-2009

Replacing GB/T 18381-2001

**Industrial rigid laminated sheets based on thermosetting resins
for electrical purposes -- Part 1: Definitions, designations and
general requirements**

电气用热固性树脂工业硬质层压板 第1部分：定义、分类和一般要求

(English Translation)

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Foreword

GB/T 1303 "thermosetting resins for electrical industrial rigid laminated board" contains the following sections.

- Part 1. Definitions, classification and general requirements;
- Part 2. Test methods;
- Part 3. Industrial rigid laminated board model;
- Part 4. rigid epoxy laminates;
- Part 5. rigid melamine resin laminate;
- Part 6. rigid phenolic resin laminate;
- Part 7. Polyester resin rigid laminates;
- Part 8. rigid silicone resin laminate;
- Part 9. rigid polyimide resin laminate;
- Part 10. bismaleimide rigid laminates;
- Part 11. Polyamide-imide resin rigid laminates;

This section GB/T 1303 Part 1.

This section identical with IEC 60893-1:2004 "thermosetting resins for electrical industrial rigid laminated sheets - Part 1. Definitions, classification and General requirements "(in English).

The technical content section and IEC 60893-1:2004 the same, only delete the reference standard "IEC 60893-4:2003 electrically insulating material Gas thermosetting resins for industrial rigid laminated sheets Part 4. Typical value ", because this part does not use to.

This Part replaces GB/T 18381-2001 "thermosetting resins for electrical industrial rigid laminated sheets definitions, designations and general Claim".

This section differs GB/T 18381-2001 are as follows.

- a) identifies the electrical components of thermosetting resins for industrial rigid laminated sheets standard "foreword" in;
- b) an increase in Chapter 2, "Normative references";
- c) an increase of "5.2 sheet size" clauses.

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 part mainly drafted by. Guilin Electrical Apparatus Research Institute, East wood Technology Group Co., Ltd., Beijing Fu Runda new insulation material Limited liability company, Xian Xi, electrical materials limited liability company.

Drafters of this section. Luozhuan Yong, Zhao Ping, Liu Qihuan, Du Chaoyun.

This part of the standard replaces the previous editions are.

--- GB/T 1305-1985, GB/T 18381-2001.

GB/T 1303.1-2009/IEC 60893-1:2004 Thermosetting resins for electrical industrial rigid laminated sheets Part 1. Definitions, classification and general requirements

1 Scope

GB/T 1303 provisions of this part of the thermosetting resins for electrical industrial rigid laminated board (hereinafter referred to as laminates) definition, classification and General requirements. Laminate according to any one of the following is made of a resin as a binder. epoxy, melamine, phenolic, polyimide, silicones, unsaturated Polyester and other resins. The following reinforcing materials may be used alone or in combination. cellulose paper, cotton cloth, glass cloth, glass roving, glass Glass mat, polyester fabric and wood veneer.

2 Normative references

The following documents contain provisions which, through GB/T reference in this 1303 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 1303.2-2009 Electrical thermosetting resins - Part 2 - Industrial rigid laminated sheets. Methods of test (IEC 60893-2).

2003, MOD)

3 Definitions

Thermosetting resin as a binder, the binder and impregnated with bonded together under heat and pressure a stack of sheet material as a reinforcing material Layer board composition.

Note: Other ingredients, such as coloring agents, may also be added.

Containing a plurality of epoxy groups and can be cross-linked synthetic resin.

Melamine and formaldehyde or another compound capable of providing a methylene bridge polycondensation of an amino resin.

Polycondensation, phenol homologues and/or derivatives thereof with formaldehyde from the resin commonly known.

By the esters of repeating structural units and with carbon - unsaturated bond and with an unsaturated monomer or prepolymer for subsequent crosslinking chains of polymer.

Polymer backbone consisting of alternating silicon atoms and oxygen atoms with side groups containing carbon atoms and can be cross-linked resin.

GB/T 1303.1-2009/IEC 60893-1:2004