IEC 61249-4-1

Edition 1.0 2008-01

INTERNATIONAL STANDARD

Materials for printed boards and other interconnecting structures – Part 4-1: Sectional specification set for prepreg materials, unclad (for the manufacture of multilayer boards) – Epoxide woven E-glass prepreg of defined flammability

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRICE CODE M

ICS 31.180

ISBN 2-8318-9585-5

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MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

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International Standard IEC 61249-4-1 has been prepared by IEC technical committee 91: Electronics assembly technology.

The text of this standard is based on the following documents:

FDIS	Report on voting
91/739/FDIS	91/747/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts belonging to the IEC 61249 series, under the general title *Materials for printed boards and other interconnecting structures,* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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1 Scope

This part of IEC 61249 gives requirements for properties of prepreg that is mainly intended to be used as bonding sheets in connection with laminates according to IEC 61249-2-7 when manufacturing multilayer boards in line with IEC 62326-4. This material may be also used to bond other types of laminates.

Prepreg according to this standard is of defined flammability (vertical burning test). The flammability rating on fully cured prepreg is achieved through the use of brominated fire retardants contained as an integral part of the polymeric structure. After lamination according to the supplier's instructions, the glass transition temperature is defined as being 120 °C minimum.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61189-2:2006, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies – Part 2: Test methods for materials for interconnection structures*

IEC 61189-3:1997, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies – Part 3: Test methods for interconnection structures (printed boards)*

IEC 61249-2-7:2002, *Materials for printed boards and other interconnecting structures – Part 2-7: Reinforced base materials clad and unclad – Epoxide woven E-glass laminated sheet of defined flammability (vertical burning test), copper-clad*

IEC 62326-4, *Printed boards – Part 4: Rigid multilayer printed boards with interlayer connections – Sectional specification*

ISO 9000:2005, *Quality management systems – Fundamentals and vocabulary*

ISO 11014-1:1994, *Safety data sheet for chemical products – Part 1: Content and order of sections*

ISO 14001:2004, *Environmental management systems – Requirements with guidance for use*