INTERNATIONAL STANDARD

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Materials for printed boards and other interconnecting structures –

Part 4-5: Sectional specification set for prepreg materials, unclad – Polyimide, modified or unmodified, woven E-glass prepreg of defined flammability

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International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch

Commission Electrotechnique Internationale
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

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International Standard IEC 61249-4-5 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
91/527/FDIS	91/537/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.

IEC 61249-4 consists of the following parts, under the general title *Materials for printed boards and other interconnecting structures – Part 4: Sectional specification set for prepreg materials, unclad:*

Part 4-1: Epoxide woven E-glass prepreg of defined flammability[1]

Part 4-2: Multifunctional epoxide woven E-glass prepreg of defined flammability

Part 4-5: Polyimide, modified or unmodified, woven E-glass prepreg of defined flammability

Part 4-11: Non-halogenated epoxide, woven E-glass prepreg of defined flammability

Part 4-12: Non-halogenated multifunctional epoxide woven E-glass prepreg of defined flammability

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- withdrawn;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 Under consideration.

MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

Part 4-5: Sectional specification set for prepreg materials, unclad – Polyimide, modified or unmodified, woven E-glass prepreg of defined flammability

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 IEC 61249-2-11 when manufacturing multilayer boards according to 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 curing according to the supplier's instructions, the glass transition temperature is defined to be 170 °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 61189-2:1997, *Test methods for electrical materials, printed boards and other interconnecting structures and assemblies – Part 2: Test methods for materials for interconnection structures*
Amendment 1 (2000)

IEC 61249-2-11, *Materials for printed boards and other interconnecting structures – Part 2-11: Sectional specification set for reinforced base materials clad and unclad – Polyimide woven E-glass laminated sheet of defined flammability copper-clad*

IEC 61249-6-3, *Material for printed boards and other interconnecting structures – Part 6-3: Sectional specification set for reinforcement materials – Woven E-glass (for the manufacture of prepregs and copper-clad base materials*[2]

IEC 62326-4:1996*, Printed boards – Part 4: Rigid multilayer printed boards with interlayer connections - Sectional specification*

ISO 9000:2000, *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*

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2 In preparation.