ICS 31.180 SLOVENSKÁ TECHNICKÁ NORMA August 2014

STN	**Materiály na plošné spoje a ostatné prepájacie štruktúry. Časť 4-19: Rámcová špecifikácia pre neplátované prepregy (na výrobu viacvrstvových dosiek). Vysokovýkonové prepregy vystužené sklenenými E-vláknami impregnované nehalogenovanou epoxidovou živicou s definovanou horľavosťou (vertikálna skúška horenia) na bezolovnaté zostavy.**	**STN EN 61249-4-19** 34 6511

Materials for printed boards and other interconnecting structures - Part 4-19: Sectional specification set for prepreg materials, unclad (for the manufacture of multilayer boards) - Hich performance non-halogenated epoxide woven E-glass prepreg of defined flammability (vertical burning test) for lead-free assembly

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Obsahuje: EN 61249-4-19:2013, IEC 61249-4-19:2013

119252

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61249-4-19

December 2013

ICS 31.180

English version

Materials for printed boards and other interconnecting structures - Part 4-19: Sectional specification set for prepreg materials, unclad (for the manufacture of multilayer boards) - Hich performance non-halogenated epoxide woven E-glass prepreg of defined flammability (vertical burning test) for lead-free assembly

(IEC 61249-4-19:2013)

Matériaux pour circuits imprimés et autres structures d'interconnexion -
Partie 4-19: Série de spécifications intermédiaires pour matériaux préimprégnés, non plaqués (pour la fabrication des cartes multicouches) -
Tissu de verre époxyde préimprégné non halogéné de type E à haute performance, d'inflammabilité définie (essai de combustion verticale), pour les assemblages sans plomb
(CEI 61249-4-19:2013)

Materialen für Leiterplatten und andere Verbindungsstrukturen -
Teil 4-19: Rahmenspezifikation für unkaschierte Prepreg-Materialien (zur Herstellung von Mehrlagenleiterplatten) -
Hochwertige mit E-Glasgewebe verstärkte Prepregs auf der Basis von halogenfreiem Epoxidharz mit definierter Brennbarkeit (Brennprüfung mit vertikaler Prüflingslage) für bleifreie Bestückungstechnik
(IEC 61249-4-19:2013)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61249-4-19:2013 E

Foreword

The text of document 91/1126/FDIS, future edition 1 of IEC 61249-4-19, prepared by IEC TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61249-4-19:2013.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2014-09-09
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-12-09

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Endorsement notice

The text of the International Standard IEC 61249-4-19:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60194:2006	NOTE	Harmonized as EN 60194:2006 (not modified).
IEC 62326-4	NOTE	Harmonized as EN 62326-4.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
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	EN 61189-2	2006
IEC 61249-2-40	-	Materials for printed boards and other interconnecting structures - Part 2-40: Reinforced base materials clad and unclad - High performance, non-halogenated epoxide woven E-glass laminate sheets of defined flammability (vertical burning test), copper-clad for lead-free assembly	EN 61249-2-40	-
IEC/PAS 61249-6-3	2011	Specification for finished fabric woven from "E" glass for printed boards	-	-
ISO 9000	2005	Quality management systems - Fundamentals and vocabulary	EN ISO 9000	2005
ISO 11014	2009	Safety data sheet for chemical products - Content and order of sections	-	-
ISO 14001	2004	Environmental management systems - Requirements with guidance for use	EN ISO 14001	2004

IEC 61249-4-19

Edition 1.0 2013-11

INTERNATIONAL STANDARD

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX
N

ICS 31.180

ISBN 978-2-8322-1167-0

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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International Standard IEC 61249-4-19 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
91/1126/FDIS	91/1148/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 of 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 stability 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.

MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

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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 61249-2-40 when manufacturing multilayer boards according to IEC 62326-4. Multilayer boards comprised of these materials are suitable for lead-free assembly processes. 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 non-halogenated fire retardants contained as an integral part of the polymeric structure. After curing of the prepreg according to the supplier's instructions, the glass transition temperature is defined to be 170 °C minimum.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, interconnection structures and assemblies – Part 2: Test methods for materials for interconnection structures*

IEC 61249-2-40, *Materials for printed boards and other interconnecting structures – Part 2-40: Reinforced base materials clad and unclad – High performance, non-halogenated epoxide woven E-glass laminate sheets of defined flammability (vertical burning test), copper-clad for lead-free assembly*

IEC/PAS 61249-6-3:2011, *Materials for printed boards and other interconnecting structures – Part 6-3: Reinforcements – Woven fibreglass fabrics*

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

ISO 11014:2009, *Safety data sheet for chemical products – Content and order of sections*

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