

STN	Materiály na plošné spoje a ostatné prepájacie štruktúry. Časť 2-44: Vystužené plátované a neplátované základné materiály. Laminátové dosky plátované medenou fóliou, vystužené netkanými, resp. tkanými sklenými E-vláknami, impregnované nehalogénovanou epoxidovou živickou s definovanou horľavosťou (vertikálna skúška horenia) na bezolovnatú zostavu.	STN EN 61249-2-44
		34 6511

Materials for printed boards and other interconnecting structures - Part 2-44: Reinforced base materials clad and unclad - Non-halogenated epoxide non-woven/woven E-glass reinforced laminate sheets of defined flammability (vertical burning test), copper-clad for lead-free assembly

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/16

Obsahuje: EN 61249-2-44:2016, IEC 61249-2-44:2016

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2016
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD

EN 61249-2-44

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2016

ICS 31.180

English Version

**Materials for printed boards and other interconnecting structures -
Part 2-44: Reinforced base materials clad and unclad -
Non-halogenated epoxide non-woven/woven E-glass reinforced
laminated sheets of defined flammability (vertical burning test),
copper-clad for lead-free assembly
(IEC 61249-2-44:2016)**

Matériaux pour circuits imprimés et autres structures
d'interconnexion - Partie 2-44: Matériaux de base renforcés,
plaqués et non plaqués - Feuilles stratifiées renforcées en
verre de type E tissé/non-tissé époxyde non halogéné,
plaquées cuivre, d'inflammabilité définie (essai de
combustion verticale) pour les assemblages sans plomb
(IEC 61249-2-44:2016)

Materialien für Leiterplatten und andere
Verbindungsstrukturen - Teil 2-44: Kaschierte und
unkaschierte verstärkte Basismaterialien - Kupferkaschierte
mit E-Glaswirrfaser im Kernbereich und E-Glasgewebe in
den Außenlagen verstärkte Laminattafeln auf der Basis von
halogenfreiem Epoxidharz definierter Brennbarkeit
(vertikale Prüflingslage) für bleifreie Bestückungstechnik
(IEC 61249-2-44:2016)

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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

European foreword

The text of document 91/1351/FDIS, future edition 1 of IEC 61249-2-44, prepared by IEC/TC 91 "Electronics assembly technology" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61249-2-44:2016.

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) 2017-03-16
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ISO 9000	NOTE	Harmonized as EN ISO 9000.
ISO 14001	NOTE	Harmonized as EN ISO 14001.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 61249-5-1	-	Materials for interconnection structures - Part 5: Sectional specification set for conductive foils and films with or without coatings - Section 1: Copper foils (for the manufacture of copper-clad base materials)	EN 61249-5-1	-
IEC/PAS 61249-6-3	-	Specification for finished fabric woven from "E" glass for printed boards	-	-
ISO 11014	-	Safety data sheet for chemical products - Content and order of sections	-	-



INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Materials for printed boards and other interconnecting structures –
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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Part 2-44: Reinforced base materials clad and unclad – Non-halogenated epoxide
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INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MATERIALS FOR PRINTED BOARDS
AND OTHER INTERCONNECTING STRUCTURES –**
**Part 2-44: Reinforced base materials clad and unclad –
Non-halogenated epoxide non-woven/woven E-glass reinforced
laminate sheets of defined flammability (vertical burning test),
copper-clad for lead-free assembly**

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International Standard IEC 61249-2-44 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
91/1351/FDIS	91/1364/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.

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

MATERIALS FOR PRINTED BOARDS AND OTHER INTERCONNECTING STRUCTURES –

Part 2-44: Reinforced base materials clad and unclad – Non-halogenated epoxide non-woven/woven E-glass reinforced laminate sheets of defined flammability (vertical burning test), copper-clad for lead-free assembly

1 Scope

This part of IEC 61249 gives requirements for properties of non-halogenated epoxide non-woven reinforced core/woven E-glass reinforced surface laminate sheets of defined flammability (vertical burning test), copper-clad for lead-free assembly in thicknesses of 0,60 mm up to 1,70 mm. The flammability rating is achieved through the use of non-halogenated fire retardants reacted as part of the epoxide polymeric structure. The glass transition temperature is defined to be 105 °C minimum.

Some property requirements may have several classes of performance. The class desired should be specified on the purchase order, otherwise the default class of material will be supplied.

2 Normative references

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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 61249-5-1, *Materials for interconnection structures – Part 5: Sectional specification set for conductive foils and films with and without coatings – Section 1: Copper foils (for the manufacture of copper-clad base materials)*

IEC PAS 61249-6-3, *Specification for finished fabric woven from "E" glass for printed boards*

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

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