

**SLOVENSKI STANDARD
SIST EN IEC 60749-39:2022****01-marec-2022****Nadomešča:****SIST EN 60749-39:2007**

**Polprevodniški elementi - Mehanske in klimatske preskusne metode - 39. del:
Meritve prepuščanja vlage organskih materialov in njihove vodotopnosti za
polprevodniške komponente (IEC 60749-39:2021)**

Semiconductor devices - Mechanical and climatic test methods - Part 39: Measurement of moisture diffusivity and water solubility in organic materials used for semiconductor components (IEC 60749-39:2021)

Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 39: Messung des Feuchtediffusionskoeffizienten und der Wasserlöslichkeit in organischen Werkstoffen, welche bei Halbleiter-Komponenten verwendet werden (IEC 60749-39:2021)

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Dispositifs à semiconducteurs - Méthodes d'essais mécaniques et climatiques - Partie 39: Mesure de la diffusion d'humidité et de l'hydrosolubilité dans les matériaux organiques utilisés dans les composants à semiconducteurs (IEC 60749-39:2021)

Ta slovenski standard je istoveten z: EN IEC 60749-39:2022**ICS:**

31.080.01	Polprevodniški elementi (naprave) na splošno	Semiconductor devices in general
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SIST EN IEC 60749-39:2022**en**

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EUROPEAN STANDARD

EN IEC 60749-39

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2022

ICS 31.080.01

Supersedes EN 60749-39:2006 and all of its amendments and corrigenda (if any)

English Version

Semiconductor devices - Mechanical and climatic test methods -
Part 39: Measurement of moisture diffusivity and water solubility
in organic materials used for semiconductor components
(IEC 60749-39:2021)

Dispositifs à semiconducteurs - Méthodes d'essais
mécaniques et climatiques - Partie 39: Mesure de la
diffusivité d'humidité et de l'hydrosolubilité dans les
matériaux organiques utilisés dans les composants à
semiconducteurs
(IEC 60749-39:2021)

Halbleiterbauelemente - Mechanische und klimatische
Prüfverfahren - Teil 39: Messung des
Feuchtediffusionskoeffizienten und der Wasserlöslichkeit in
organischen Werkstoffen, welche bei Halbleiter-
Komponenten verwendet werden
(IEC 60749-39:2021)

This European Standard was approved by CENELEC on 2022-01-03. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60749-39:2022 (E)**European foreword**

The text of document 47/2652/CDV, future edition 2 of IEC 60749-39, prepared by IEC/TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60749-39:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-10-03 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2025-01-03 document have to be withdrawn

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The text of the International Standard IEC 60749-39:2021 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where 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 60749-20	-	Semiconductor devices - Mechanical and climatic test methods - Part 20: Resistance of plastic encapsulated SMDs to the combined effect of moisture and soldering heat	EN IEC 60749-20	-

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IEC 60749-39

Edition 2.0 2021-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

iTeh STANDARD

**Semiconductor devices – Mechanical and climatic test methods –
Part 39: Measurement of moisture diffusivity and water solubility in organic
materials used for semiconductor components**

**Dispositifs à semiconducteurs – Méthodes d'essais mécaniques et
climatiques –
Partie 39: Mesure de la diffusivité d'humidité et de l'hydrosolubilité dans les
matériaux organiques utilisés dans les composants à semiconducteurs**

INTERNATIONAL
ELECTROTECHNICAL
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COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 31.080.01

ISBN 978-2-8322-1046-7

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2022

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SEMICONDUCTOR DEVICES –
MECHANICAL AND CLIMATIC TEST METHODS –

**Part 39: Measurement of moisture diffusivity and water solubility in
organic materials used for semiconductor components**

FOREWORD

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IEC 60749-39 has been prepared by IEC technical committee 47: Semiconductor devices. It is an International Standard.

This second edition, based on JEDEC document JESD22-A120B, cancels and replaces the first edition published in 2006. It is used with permission of the copyright holder, JEDEC Solid State Technology Association. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) updated procedure for "dry weight" determination.

The text of this International Standard is based on the following documents:

Draft	Report on voting
47/2652/CDV	47/2725/RVC

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all the parts of the IEC 60749 series, under the general title *Semiconductor devices – Mechanical and climatic test methods*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

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