

---

---

**Gospodinjski in podobni električni aparati - Varnost - 2-52. del: Posebne zahteve za aparate za ustno nego (IEC 60335-2-52:2002)**

Household and similar electrical appliances - Safety - Part 2-52: Particular requirements for oral hygiene appliances

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 60335-2-52:2003](https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003)

<https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 60335-2-52:2003

<https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003>

EUROPEAN STANDARD

**EN 60335-2-52**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2003

ICS 13120; 97.170

Supersedes EN 60335-2-52:1996

English version

**Household and similar electrical appliances –  
Safety  
Part 2-52: Particular requirements for oral hygiene appliances  
(IEC 60335-2-52:2002)**

Appareils électrodomestiques et  
analogues –  
Sécurité  
Partie 2-52: Règles particulières pour  
les appareils d'hygiène buccale  
(CEI 60335-2-52:2002)

Sicherheit elektrischer Geräte für den  
Hausgebrauch und ähnliche Zwecke  
Teil 2-52: Besondere Anforderungen für  
Mundpflegegeräte  
(IEC 60335-2-52:2002)

**iteh STANDARD PREVIEW**  
**(standards.iteh.ai)**

This European Standard was approved by CENELEC on 2003-05-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of the International Standard IEC 60335-2-52:2002 (61/2221/FDIS), prepared by the IEC Technical Committee 61, Safety of household and similar electrical appliances, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60335-2-52 on 2003-05-01.

This European Standard replaces EN 60335-2-52:1996.

The following dates are applicable:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-05-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2006-05-01

This part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for electric oral hygiene appliances.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

There are no special national conditions causing a deviation from this European Standard, other than those listed in Annex ZA to EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

---

## Introduction

p Add:

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 98/37/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

---

## Endorsement notice

The text of the International Standard IEC 60335-2-52:2002 was approved by CENELEC as a European Standard without any modification.

---

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 60335-2-52:2003](https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003)

<https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 60335-2-52:2003

<https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003>

NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC

60335-2-52

Troisième édition  
Third edition  
2002-10

---

---

Appareils électrodomestiques et analogues –  
Sécurité –

Partie 2-52:  
Règles particulières pour les appareils  
d'hygiène buccale

(standards.iteh.ai)

Household and similar electrical appliances –  
Safety –

<https://standards.iteh.ai/catalog/standards/sist/7709fb5b-7a04-49f0-bfc0-3f252aff4096/sist-en-60335-2-52-2003>

Part 2-52:  
Particular requirements for oral hygiene  
appliances

© IEC 2005 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembe, 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  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

L

Pour prix, voir catalogue en vigueur  
For price, see current catalogue

## CONTENTS

FOREWORD.....	5
INTRODUCTION.....	9
1 Scope.....	11
2 Normative references.....	11
3 Definitions.....	11
4 General requirement.....	13
5 General conditions for the tests.....	13
6 Classification.....	13
7 Marking and instructions.....	13
8 Protection against access to live parts.....	13
9 Starting of motor-operated appliances.....	13
10 Power input and current.....	13
11 Heating.....	15
12 Void.....	15
13 Leakage current and electric strength at operating temperature.....	15
14 Transient overvoltages.....	15
15 Moisture resistance.....	15
16 Leakage current and electric strength.....	15
17 Overload protection of transformers and associated circuits.....	15
18 Endurance.....	15
19 Abnormal operation.....	15
20 Stability and mechanical hazards.....	17
21 Mechanical strength.....	17
22 Construction.....	17
23 Internal wiring.....	17
24 Components.....	19
25 Supply connection and external flexible cords.....	19
26 Terminals for external conductors.....	19
27 Provision for earthing.....	19
28 Screws and connections.....	19
29 Clearances, creepage distances and solid insulation.....	19
30 Resistance to heat and fire.....	19
31 Resistance to rusting.....	19
32 Radiation, toxicity and similar hazards.....	19
Annexes.....	21
Bibliography.....	21



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

---

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –  
SAFETY –**
**Part 2-52: Particular requirements for oral hygiene appliances**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 1994. It constitutes a technical revision.

This bilingual version (2005-10) replaces the English version.

The text of this part of IEC 60335 is based on the following documents:

FDIS	Report on voting
61/2221/FDIS	61/2296/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.