

## SLOVENSKI STANDARD SIST EN 60335-2-52:1997

01-junij-1997

Nadomešča:

SIST EN 60335-2-52:1995

Varnost gospodinjskih in podobnih električnih aparatov - 2-52. del: Posebne zahteve za aparate za ustno nego (IEC 60335-2-52:1994)

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

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-52: Besondere Anforderungen für Mundpflegegeräte

Sécurité des appareils électrodomestiques et analogues -- Partie 2-52: Règles particulières pour les appareils d'hygiène buccale ist/cfadd6a6-d41f-48a0-8f86-c21f4ee10b31/sist-en-60335-2-52-1997

Ta slovenski standard je istoveten z: EN 60335-2-52:1996

ICS:

13.120 Varnost na domu Domestic safety

97.170 Oprema za nego telesa Body care equipment

SIST EN 60335-2-52:1997 en

SIST EN 60335-2-52:1997

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60335-2-52:1997</u> https://standards.iteh.ai/catalog/standards/sist/cfadd6a6-d41f-48a0-8f86-c21f4ee10b31/sist-en-60335-2-52-1997

## **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

EN 60335-2-52

July 1996

ICS 97.170

Supersedes EN 60335-2-52:1991

Descriptors: Household electrical appliances, tooth-brushes, safety requirements, protection against electric shock, fire protection, protection against mechanical hazard

English version

### Safety of household and similar electrical appliances Part 2: Particular requirements for oral hygiene appliances (IEC 335-2-52:1994)

Sécurité des appareils électrodomestiques et analogues Partie 2: Règles particulières pour les appareils d'hygiène buccale (CEI 335-2-52:1994) eh STANDARD P (IEC 335-2-52:1994)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke Teil 2: Besondere Anforderungen für Mundpflegegeräte

(standards.iteh.ai)

SIST EN 60335-2-52:1997 https://standards.iteh.ai/catalog/standards/sist/cfadd6a6-d41f-48a0-8f86c21f4ee10b31/sist-en-60335-2-52-1997

This European Standard was approved by CENELEC on 1996-07-02. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

<sup>1996</sup> Copyright reserved to CENELEC members

Page 2 EN 60335-2-52:1996

#### **Foreword**

The proposal to endorse IEC 335-2-52:1994, document CLC/TC 61(SEC)968, was circulated under the enquiry procedure in July 1994. This proposal was discussed during the Dublin meeting in May 1995, when it was decided to submit a draft for EN 60335-2-52 to the formal vote.

This draft was circulated in January 1996 and was ratified by CENELEC as EN 60335-2-52 on 1996-07-02.

This European Standard has been prepared by the secretariat of CENELEC Technical Committee TC 61.

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) 1997-01-01

 date on which national standards conflicting with the EN have to be withdrawn

(dow) 1999-01-01

For products which have complied with EN 60335-2-52:1991 before 1999-01-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2004-01-01.

This standard has to be used in conjunction with EN 60335-1. Safety of household and similar electrical appliances, Part 1: General requirements. It was established on the basis of the 1994 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: 6-c21f4ee10b31/sist-en-60335-2-52-1997

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

Subclauses which are additional to those in part 1 are numbered starting with 101.

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.

NOTE - 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 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

#### **Endorsement notice**

The text of the International Standard IEC 335-2-52:1994 was approved by CENELEC as a European Standard without any modification.

## NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI IEC 335-2-52

> Deuxième édition Second edition 1994-06

## Sécurité des appareils électrodomestiques et analogues

### Partie 2:

Règles particulières pour les appareils iTehd'hygiène buccale PREVIEW

(standards.iteh.ai)

### Safety of household and similar electrical

https://standa**appliances**andards/sist/cfadd6a6-d41f-48a0-8f86-c21f4ee10b31/sist-en-60335-2-52-1997

#### Part 2:

Particular requirements for oral hygiene appliances

© CEI 1994 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.

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse



Commission Electrotechnique Internationale International Electrotechnical Commission Международная Электротехническая Комиссия CODE PRIX
PRICE CODE



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

### CONTENTS

		Pages
FO	REWORD	. 5
Clau	use	
1	Scope	. 9
2	Definitions	
3	General requirement	
4	General conditions for the tests	
5	Void	
6	Classification	
7.	Marking and instructions	
8	Protection against access to live parts	
9	Starting of motor-operated appliances	
10	Power input and current	
11	Heating	
12	Void	
13	Leakage current and electric strongth at approximate approximate	40
1,4	Void	13
15	Moisture resistance SISTEN 60225 2 52:1007	13
16	Leakage current and electric strength standards/sist/cfadd6a6-d41f-48a0-8f86- c21f4ee10b31/sist-en-60335-2-52-1997 Overload protection of transformers and associated circuits	13
17	C21t4ee10b31/sist-en-60335-2-52-1997 Overload protection of transformers and associated circuits	13
18	Endurance	
19	Abnormal operation	
20	Stability and mechanical hazards	
21	Mechanical strength	15
22	Construction	
23	Internal wiring	17
24	Components	17
25	Supply connection and external flexible cords	17
26	Terminals for external conductors	
27	Provision for earthing	
28	Screws and connections	
29	Creepage distances, clearances and distances through insulation	
30	Resistance to heat, fire and tracking	17
31	Resistance to rusting	
32	Radiation, toxicity and similar hazards	
۸nn	exes	19

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

## Part 2: Particular requirements for oral hygiene appliances

#### **FOREWORD**

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The 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 the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards52\_1997

This part of International Standard IEC 335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

It forms the second edition of IEC 335-2-52 and replaces the first edition.

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

DIS	Report on voting
61(CO)783	61(CO)797

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

This part 2 is to be used in conjunction with the latest edition of IEC 335-1 and its amendments. It was established on the basis of the third edition (1991) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 335-1, so as to convert it into the IEC standard: Safety requirements for electric oral hygiene appliances.

335-2-52 © IEC:1994

-7-

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

#### **NOTES**

- 1 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 2. When a definition of part 1 concerns an adjective, in this part 2 the adjective and the associated noun are also in **bold**.

2 Subclauses which are additional to those in part 1 are numbered starting from 101.

The following additional differences exist in some countries:

- Clause 3: The d.c. component in the appliance neutral is limited (Australia).
- 6.1: Class 0 appliances and class 0 hand-held parts are allowed (Japan).
- 6.1: The replacement is not applicable (USA).
- 7.12.1: Additional instructions are required (USA).
- 11.7: The duration and number of cycles are different (USA).
- 19.101: The test is different (USA).

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60335-2-52:1997</u> https://standards.iteh.ai/catalog/standards/sist/cfadd6a6-d41f-48a0-8f86-c21f4ee10b31/sist-en-60335-2-52-1997

## SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

## Part 2: Particular requirements for oral hygiene appliances

#### 1 Scope

This clause of part 1 is replaced by:

This standard deals with the safety of electric oral hygiene appliances for household and similar purposes, their rated voltage being not more than 250 V.

NOTE 1 - Examples of appliances covered by this standard are

- tooth brushes;
- oral irrigators.

So far as is practicable, this standard deals with the common hazards presented by appliances which are encountered by all persons in and around the home.

This standard does not in general take into account

- the use of appliances by young children or infirm persons without supervision;

(standards.iteh.ai)

playing with the appliance by young children.

**NOTES** 

SIST EN 60335-2-52:1997

- 2 Attention is drawn to the fact that. ai/catalog/standards/sist/cfadd6a6-d41f-48a0-8f86-
- c21f4ee10b31/sist-en-60335-2-52-1997

   for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- for appliances intended to be used in tropical countries special requirements may be necessary;
- in many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour and similar authorities.
- 3 This standard does not apply to appliances for medical purposes (IEC 601).

#### 2 Definitions

This clause of part 1 is applicable except as follows:

### 2.2.9 Replacement:

normal operation: Appliances are operated under the following conditions.

Oral irrigators are operated with the container filled with water having a temperature approximately 45 °C, to the level specified in the instructions for use. In the absence of such instructions, the container is filled to the maximum level.

Other appliances are operated without load.