

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Household and similar electrical appliances – Safety –  
Part 2-5: Particular requirements for dishwashers**

**Appareils électrodomestiques et analogues – Sécurité –  
Partie 2-5: Exigences particulières pour les lave-vaisselle**

[IEC 60335-2-5:2012](https://standards.iteh.ai/)

<https://standards.iteh.ai/catalog/standards/iec/45b0424a-60c5-44a9-9996-3d35876435f8/iec-60335-2-5-2012>



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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Edition 6.1 2018-02  
CONSOLIDATED VERSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**IEC 60335-2-5**  
Edition 6.0 2012-11

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –**

**Part 2-5: Particular requirements for dishwashers**

**INTERPRETATION SHEET 1**

This interpretation sheet has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this interpretation sheet is based on the following documents:

| DISH         | Report on voting |
|--------------|------------------|
| 61/5882/DISH | 61/5894/RVDISH   |

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

[IEC 60335-2-5:2012](https://standards.iteh.ai/catalog/standards/iec/45b0424a-60c5-44a9-9996-3d35876435f8/iec-60335-2-5-2012)

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**TC 61 interpretation sheet on: Detergent composition in Table AA.1 of IEC 60335-2-5:2012**

**Introduction**

It has been reported that Plurafac RA 43 is no longer readily available. This causes a problem when preparing the detergent specified in Table AA.1 of IEC 60335-2-5:2012.

**QUESTION:**

Instead of Plurafac RA 43, can polyoxyethylene 4 lauryl ether (chemical formulae  $C_{14}H_{30}O_2$ ) be used ?

**ANSWER:**

Yes. Polyoxyethylene 4 lauryl ether (chemical formulae  $C_{14}H_{30}O_2$ ) can be used as a substitute for Plurafac RA 43 in the detergent composition detailed in Table AA.1 of IEC 60335-2-5:2012.

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## CONTENTS

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

|  |    |
|--|----|
| Figure 101 – Arrangement of work surface for spillage test on built-in dishwashers ..... | 19 |
|--|----|



|   |    |
|---|----|
| Figure 102 – Arrangement of work surface for spillage test on built-in dishwashers<br>in partially door opened position ..... | 19 |
| Table AA.1 – Detergent composition .....  | 20 |
| Table AA.2 – Rinsing agent composition .....  | 20 |

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

#### Part 2-5: Particular requirements for dishwashers

#### FOREWORD

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**This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.**

**IEC 60335-2-5 edition 6.1 contains the sixth edition (2012-11) [documents 61/4450/FDIS and 61/4503/RVD] and its amendment 1 (2018-02) [documents 61/5591/FDIS and 61/5624/RVD].**

**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.**

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

This sixth edition constitutes a technical revision.

The principal changes in this edition as compared with the fifth edition of IEC 60335-2-5 are as follows (minor changes are not listed):

- added requirements to 22.104 to address switch issues;
- converted notes to normative text (3.1.9, 7.12, 10.1, 10.2, 15.101, 22.6, 22.103, AA.1, AA.2, Annex BB – Clause 4);
- deleted notes (19.101, 22.6, 23.101, AA.2).

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fifth edition (2010) of that standard.

NOTE 1 When “Part 1” is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for dishwashers.

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 in Part 1 is to be adapted accordingly.

NOTE 2 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.

NOTE 3 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.

The committee has decided that the contents of the base publication and its amendment 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.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

A list of all parts of the IEC 60335 series, under the general title: *Household and similar electrical appliances – Safety*, can be found on the IEC website.

The following differences exist in the countries indicated below.

- 6.1: Appliances may be of class 0I, if the rated voltage does not exceed 150 V (Japan).
- 20.102: A 30 000 cycle endurance test is carried out on door interlocks (USA).
- 25.7: The supply cord is required to have a free length of at least 1,5 m (USA).
- Annex AA: The detergent and rinsing agent are different (USA).
- Annex BB: Different tests are carried out (USA).

The contents of the corrigendum of August 2018 have been included in this copy.

The contents of the interpretation sheet September 2019 have been included in this copy.

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

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## INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features which impair the level of safety covered by these requirements.

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

## HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

### Part 2-5: Particular requirements for dishwashers

#### 1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric dishwashers for household and similar purposes that are intended for washing and rinsing dishes, cutlery and other utensils, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

Appliances intended for normal household and similar use and that may also be used by laymen in shops, in light industry and on farms, are within the scope of this standard. However, if the appliance is intended to be used professionally for washing and rinsing dishes and cutlery and other utensils that are used for commercial purposes, the appliance is not considered to be for household and similar use only.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account

- persons (including children) whose
  - physical, sensory or mental capabilities, or
  - lack of experience and knowledgeprevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

NOTE 101 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional 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, the national water supply authorities and similar authorities.

NOTE 102 This standard does not apply to

- commercial electric dishwashing machines (IEC 60335-2-58);
- appliances intended for industrial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

#### 2 Normative references

This clause of Part 1 is applicable except as follows.

*Addition:*

IEC 60436, *Electric dishwashers for household use – Methods for measuring the performance*