

# SLOVENSKI STANDARD SIST EN IEC 62474:2019

01-april-2019

Nadomešča:  
SIST EN 62474:2012

---

## Deklaracija materialov za izdelke elektronske industrije

Material declaration for products of and for the electrotechnical industry

Materialdeklaration für Produkte der elektrotechnischen Industrie und für die elektrotechnische Industrie

Déclaration de matière pour des produits de et pour l'industrie électrotechnique

**Ta slovenski standard je istoveten z: EN IEC 62474:2019**

### ICS:

01.110	Tehnična dokumentacija za izdelke	Technical product documentation
29.020	Elektrotehnika na splošno	Electrical engineering in general
31.020	Elektronske komponente na splošno	Electronic components in general

**SIST EN IEC 62474:2019**

**en**

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

[SIST EN IEC 62474:2019](#)

<https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019>

EUROPEAN STANDARD

**EN IEC 62474**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2019

ICS 01.110; 13.020; 29.100; 31.020

Supersedes EN 62474:2012

English Version

**Material declaration for products of and for the electrotechnical industry  
(IEC 62474:2018)**

Déclaration de matières pour des produits de et pour  
l'industrie électrotechnique  
(IEC 62474:2018)

Materialdeklaration für Produkte der elektrotechnischen  
Industrie und für die elektrotechnische Industrie  
(IEC 62474:2018)

This European Standard was approved by CENELEC on 2019-01-04. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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 62474:2019 (E)****European foreword**

The text of document 111/498/FDIS, future edition 2 of IEC 62474, prepared by IEC/TC 111 "Environmental standardization for electrical and electronic products and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62474:2019.

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) 2019-10-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-01-04

This document supersedes EN 62474:2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

**Endorsement notice**

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

The text of the International Standard IEC 62474:2018 was approved by CENELEC as a European Standard without any modification.

[SIST EN IEC 62474:2019](https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 63000:2016	NOTE	Harmonized as EN IEC 63000:2018 (not modified)
IEC 82045-1:2001	NOTE	Harmonized as EN 82045-1:2001 (not modified)
IEC 82045-2:2004	NOTE	Harmonized as EN 82045-2:2005 (not modified)
ISO 1043-1:2011	NOTE	Harmonized as EN ISO 1043-1:2011 (not modified)
ISO 1043-2:2011	NOTE	Harmonized as EN ISO 1043-2:2011 (not modified)
ISO 1043-3:2016	NOTE	Harmonized as EN ISO 1043-3:2016 (not modified)
ISO 1043-4:1998	NOTE	Harmonized as EN ISO 1043-4:1999 (not modified)
ISO 9000:2015	NOTE	Harmonized as EN ISO 9000:2015 (not modified)
ISO 14020:2000	NOTE	Harmonized as EN ISO 14020:2001 (not modified)
ISO 14024:2018	NOTE	Harmonized as EN ISO 14024:2018 (not modified)
ISO 14025:2006	NOTE	Harmonized as EN ISO 14025:2010 (not modified)
ISO 14040:2006	NOTE	Harmonized as EN ISO 14040:2006 (not modified)

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61360-1	-	Standard data element types with associated classification scheme - Part 1: Definitions - Principles and methods	EN 61360-1	2017
IEC 61360-2	-	Standard data element types with associated classification scheme for electric components - Part 2: EXPRESS dictionary schema	EN 61360-2	2013
ISO/IEC directives Supplement	-	Procedures specific to IEC	-	-

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

[SIST EN IEC 62474:2019](#)

<https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019>



IEC 62474

Edition 2.0 2018-11

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Material declaration for products of and for the electrotechnical industry**

**Déclaration de matières pour des produits de et pour l'industrie  
électrotechnique**

[SIST EN IEC 62474:2019](https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019)

<https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019>

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 01.110; 13.020.01; 29.100

ISBN 978-2-8322-6287-0

**Warning! Make sure that you obtained this publication from an authorized distributor.  
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

## CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	8
2 Normative references .....	8
3 Terms and definitions .....	8
4 Requirements for material declarations.....	12
4.1 General.....	12
4.1.1 Overview .....	12
4.1.2 Conformity to the IEC 62474 standard .....	15
4.1.3 General requirements .....	16
4.2 Business information.....	16
4.3 Product information.....	16
4.4 Declaration for compliance requirements .....	16
4.4.1 General information .....	16
4.4.2 DSs and DSGs with mandatory reporting requirements.....	16
4.4.3 DSs and DSGs with optional reporting requirements.....	18
4.5 Composition declaration requirements .....	18
4.5.1 General requirements.....	18
4.5.2 Product parts.....	18
4.5.3 Materials .....	19
4.5.4 DSs and DSG substance(s) with mandatory reporting requirements.....	20
4.5.5 DSs and DSG substance(s) with optional reporting requirements.....	21
4.5.6 Other substance(s).....	21
4.6 Material class declaration .....	21
4.7 Other information .....	22
4.7.1 Query lists .....	22
4.7.2 Attachments .....	22
4.7.3 Requester/responder mode.....	22
4.7.4 Distribution mode.....	22
5 Criteria and thresholds for DSs, DSGs and material classes in the IEC 62474 database .....	22
5.1 General.....	22
5.2 DSs and DSGs criteria .....	22
5.3 Material class criteria .....	23
5.4 Reporting threshold levels and reportable applications for DSs and DSGs .....	24
5.5 Threshold levels for material classes .....	24
5.6 Reference substances in the IEC 62474 database .....	24
6 Criteria for exemption lists in the IEC 62474 database.....	24
7 IEC 62474 database data format and exchange.....	24
7.1 General.....	24
7.2 Data exchange format.....	25
7.3 Data exchange.....	25
7.3.1 Two-way and one-way data exchange .....	25
7.3.2 Data exchange specification in the IEC 62474 database .....	25
7.3.3 Additional data exchange requirements .....	26
7.3.4 XML file .....	26



7.4	Criteria for the IEC 62474 database maintenance of data exchange format.....	26
8	IEC 62474 database maintenance .....	26
8.1	General.....	26
8.2	IEC 62474 database update process.....	26
8.3	Reclassification and removal of DSs and DSGs from the IEC 62474 DSL.....	27
8.4	Maintenance of exemption lists in the IEC 62474 database .....	27
8.5	Maintenance of data exchange format.....	28
	Annex A (informative) Simplified representation of data exchange format .....	29
	Bibliography.....	35
	Figure 1 – IEC 62474 principles .....	7
	Figure 2 – Material declaration capabilities .....	13
	Figure 3 – Material declaration structure .....	14
	Figure 4 – Data model for a declaration for compliance.....	14
	Figure 5 – Data model for a composition declaration.....	15
	Table 1 – DSs and DSGs criteria .....	23
	Table A.1 – Data element types of a material declaration.....	30

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

[SIST EN IEC 62474:2019](https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019)

<https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019>

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MATERIAL DECLARATION FOR PRODUCTS OF  
AND FOR THE ELECTROTECHNICAL INDUSTRY**

## 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 itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 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.

International Standard IEC 62474 has been prepared by IEC Technical Committee 111: Environmental standardization for electrical and electronic products and systems.

This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision.

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

- a) The material classes and exemption lists capabilities have been improved.
- b) The introduction and scope have new diagrams and information to give a better overview of the standard and identify what information is mandatory, optional or conditionally mandatory.
- c) Definitions have been added. Minimum requirements to be in conformance with the IEC 62474 standard are defined, including XML format as the officially accepted format. By defining an authority, list identity and list version, the standard format could be used for lists other than the IEC 62474 database.

- d) Terms have been aligned for consistency throughout the document. For example, the “IEC 62474 database” was previously referred to as “IEC 62474 database”, “IEC 62474”, “IEC 62474 Database”, “IEC 62474 DB”.
- e) The annexes have been removed as they are now contained within documents managed by the validation team 62474 (VT 62474). Annex A (Annex B in the previous edition) is provided for non-XML users as a reference only.

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

FDIS	Report on voting
111/498/FDIS	111/503/RVD

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

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

A list of all parts in the IEC 62474 series, published under the general title *Material declaration for products of and for the electrotechnical industry*, 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 “<http://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.

(standards.iteh.ai)

[SIST EN IEC 62474:2019](https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019)

<https://standards.iteh.ai/catalog/standards/sist/6ac36faa-e8b3-4371-957e-5ba419d9aa73/sist-en-iec-62474-2019>

**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.**

## INTRODUCTION

This document benefits the electrotechnical industry by establishing requirements for reporting of material declaration data, standardizing protocols, and facilitating the transfer and processing of data. Material declarations are used by the electrotechnical industry to track and declare specific product information used for compliance and/or environmentally conscious design (ECD) considerations. To simplify requirements across the supply chain and to improve economic efficiencies, it is important to standardize the exchange of product, product part, material and substance data, and provide requirements within material declarations.

IEC 62474 is made of two parts: this document, which contains requirements for material declarations and a database containing information such as a declarable substance list (DSL), exemption list and data exchange format (see Clause 8).

This document defines the two most common types of material declarations and their requirements:

- 1) Declaration for compliance – is always at a product level in reference to the list of declarable substances and declarable substance groups within the IEC 62474 declarable substance list (DSL).
- 2) Composition declaration – is the much more detailed product part level reporting down to individual substances contained within the IEC 62474 DSL.

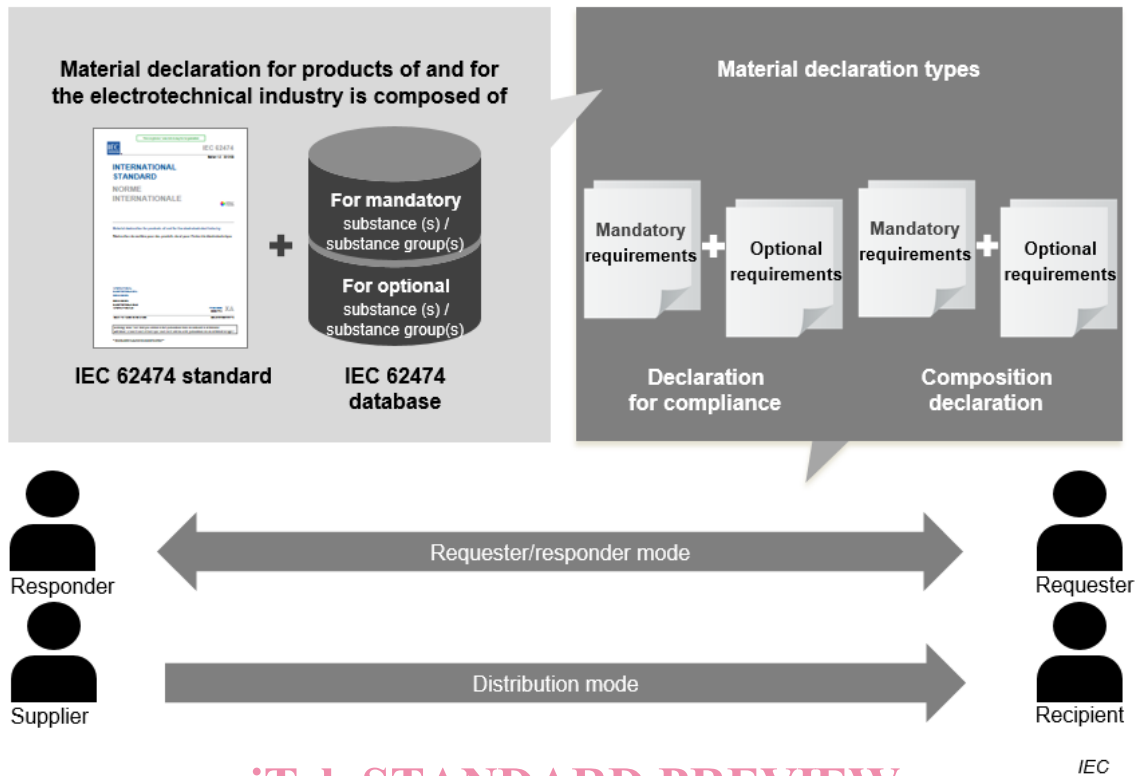
The IEC 62474 database is maintained by the validation team (VT 62474) which updates information in the IEC 62474 database based on requirements specified in the IEC 62474 standard (see Clause 8).

By fulfilling the requirements of the IEC 62474 standard and based on the information from the IEC 62474 database, two types of declaration can be created as shown in Figure 1 below.

- a declaration for compliance which is the information required to determine product compliance with substance regulations and market needs (see 4.4);
- a composition declaration that is the information required to assess where declarable substances above threshold are contained in the product (see 4.5).

The transmission of information in the supply chain can be done in two modes:

- Distribution mode: The supplier provides material declaration data about their product(s) to a recipient.
- Requester/responder mode: The requester determines the type of material declaration(s) the responder will provide.



## iTeh STANDARD PREVIEW

Figure 1 – IEC 62474 principles

The IEC 62474 principles are determined in the following clauses:

- Clause 4 specifies requirements for material declarations.
- Clause 5 specifies the criteria and thresholds for declarable substances (DSs), declarable substance groups (DSGs) and material classes in the IEC 62474 database.
- Clause 6 specifies the criteria for exemption lists in the IEC 62474 database.
- Clause 7 specifies the IEC 62474 database data format and exchange requirements with further information in Annex A (informative).
- Clause 8 specifies the IEC 62474 database maintenance process.