IEC TS 62474-1

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TECHNICAL SPECIFICATION

colour inside

Material declaration for products of and for the electrotechnical industry – Part 1: Guidance on the implementation of IEC 62474

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MATERIAL DECLARATION FOR PRODUCTS OF AND FOR THE ELECTROTECHNICAL INDUSTRY –

Part 1: Guidance on the implementation of IEC 62474

FOREWORD

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IEC TS 62474-1 has been prepared by IEC technical committee 111: Environmental standardization for electrical and electronic products and systems. It is a Technical Specification.

This first edition of IEC TS 62474-1 cancels and replaces IEC TR 62474-1:2015.

This edition includes the following significant technical changes with respect to IEC TR 62474-1:2015:

a) IEC TR 62474-1:2015 was revised and converted to a Technical Specification in accordance with the requirements of the ISO/IEC Directives;
b) the introduction and scope have been updated to better align with the requirements of IEC 62474:2018;
c) by defining an authority, list identity and list version, the standard data exchange format can be used for lists other than the IEC 62474 database;
d) two types of material declarations, declaration for compliance and composition declaration, and their requirements are defined;

e) the material classes and exemption list capabilities have been improved;

f) guidance is provided on how to use data fields in the declaration of compliance and composition declaration to collect the information required for the European Chemical Agency (ECHA) Substances of Concern In articles, as such or in complex objects (Products) (SCIP) database;

g) six examples of material declaration are given to show how IEC 62474 meets various industry needs.

The text of this Technical Specification is based on the following documents:

Draft	Report on voting
111/654/DTS	111/671/RVDTS

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 Technical Specification 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/publications.

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 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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INTRODUCTION

There are ever increasing legal regulations around the world along with supply chain requirements that either restrict or require reporting or labeling the use of certain substances in products. To determine a product compliance status, manufacturers need information about the substances in the product that can be passed down the supply chain. This can include data about materials as well as product parts used in products. This information can also be used as one of the inputs in an environmentally conscious design process throughout the product life cycles.

To make material declaration data readily available, the supply chain (including organizations providing products to the electrotechnical industry) needs a standardized method to exchange this type of data. The IEC 62474 standard is flexible for, not only identifying base requirements, but also allowing all levels of additional reporting under defined rules, so that the data is properly exchanged through the supply chain. The IEC 62474 standard uses a single format for data exchange rather than relying on each customer's own format.

Broad implementation by electrotechnical industry and organizations can result in:

- material declaration data being available as part of the contract sales of products in the electrotechnical industry,
- availability of material declaration data that is not dependent on an organization's size or purchase volume,
- improvement of data quality, reduction of compliance costs and reduction of inefficiencies, and
- faster assessments of products and materials compliance status.

Material declarations meeting the IEC 62474 standard provide data needed to make a substance compliance assessment. They can also be used as part of the technical documentation required to place products on the market in different regions. Examples are:

- the EU Restriction of Hazardous Substances (RoHS) Directive;
- the EU Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- the EU Eco-design Directive;
- the Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products (China RoHS 2).

Government authorities that issue substance restriction regulations need to have economic methods to obtain substance data to conform to these requirements that allow for international trade. IEC standards such as IEC 62474 are recognized by the World Trade Organization (WTO). This means that government authorities can adopt IEC 62474 to provide an economically feasible standard to its resident companies to get needed data from a supply chain in order to achieve the substance restrictions and be assured that such rules facilitate international trade and are in conformance with WTO standards.

Also, restricted substance regulations usually include exemptions for certain products based on available technology or other issues. Exemptions are dynamic and often based on changes to technology and products. This requires government resources to evaluate exemptions from product suppliers and exemptions issued by other government authorities to determine suitability. It is possible governments are not able to update exemptions based on a direct referral to exemptions issued by other governments. This results in significant costs and time lags to do analyses and grant updated exemptions, especially if government authorities lack expertise or adequate funding to perform these tasks. If an exemption approved by a government authority is not adopted in a timely manner, this can put the local economy at a disadvantage because certain products cannot then be placed on the local market. In the case of some product sectors, such as medical devices, this also can prevent access to life-saving technologies.

IEC 62474 now allows government authorities to adopt exemptions from other government authorities by referencing the international IEC 62474 database. Since the IEC 62474 database maintains current exemption lists, governments may rely on this database without additional resources or time.