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Packaging — Accessible design — Information and marking

Emballages — Conception accessible — Informations et marquage

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 122, *Packaging*.

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Introduction

In our aging and welfare-oriented society, there is an increasing awareness of full and effective participation of older persons and persons with disabilities in society on an equal basis. A common challenge facing the packaging industry in the world is to develop packages which have clear information and marking necessary for use and purchase that are understandable for the widest possible range of users, including older persons and persons with disabilities.

Information and marking on packaging go beyond ensuring safety and security to also add more value to the packaged products for older persons and persons with disabilities. When designing packaging that is expected to ensure accurate and appropriate information, greater consideration is required for increasing accessibility to the packaged products for older persons and persons with disabilities. Such persons sometimes have difficulties in obtaining and understanding the information conveyed by labelling and other means of information technologies such as a bar code read by a smart phone.

Noting that the degree of comprehension for information and marking can vary widely according to age and human abilities such as sensory and cognitive abilities, this document addresses essential points to enhance the accessibility of information and marking in packaging in the concept s and goals which are expressed in ISO/IEC Guide 71[11] and ISO/TR 22411[8].

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Packaging — Accessible design — Information and marking

1 Scope

This document provides requirements and recommendations concerning accessible design of consumer packaging with regard to information and marking.

This document specifies considerations and methods for designing and presenting information and marking to make consumer packages accessible to people with the widest range of capabilities by considering their sensory and cognitive abilities.

This document applies to all types of information and marking presented on consumer packaging. Specifically excluded from this document are information and marking for medicinal products and medical devices including tamper verification.

The design considerations and methods specified in this document are primarily intended for designers, developers and evaluators of packaging.

2 Normative references

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.

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 8317, *Child-resistant packaging — Requirements and testing procedures for reclosable packages*

ISO 17351, *Packaging — Braille on packaging for medicinal products*

ISO 21067-1, *Packaging — Vocabulary — Part 1: General terms*

ISO 24503, *Ergonomics — Accessible design --Tactile dots and bars on consumer products*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21067-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
cognition
extent to which a user can understand the appropriate information as it is intended

[SOURCE: ISO 17480:2015, 3.5]

3.2
consumer packaging
packaging, constituting, with its contents, a sales unit to the final user or consumer at the point of retail

[SOURCE: ISO 17480:2015, 3.1]

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3.3
context of use
combination of specified users, goals and tasks, resources and environment

Note 1 to entry: The environment in a context of use includes the technical, physical, social and organizational environments.

[SOURCE: ISO 9241-11:1998, 3.5 — modified.]

3.4
instrument-based evaluation
evaluation that uses measurement instruments to obtain data

3.5
user-based evaluation
evaluation that uses a method involving users with or without the use of measurement instruments and provides insight into the user's sensory, physical and cognitive aspects

3.6
tactile information
human sensory information generated by touch

Note 1 to entry: There are two types of touch sensing. One is passive and the other active, the latter being called haptic. In this document, tactile information means both types of touch sensing.

4 Design considerations for increasing accessibility of information and marking for packaging

4.1 General design consideration

4.1.1 Considerations of diverse users and diverse contexts of use

Designing information and marking of packaging shall consider on diverse users and diverse context of use. Diverse users include users with different ages, genders, human abilities (sensory, physical and cognitive), languages, as well as life styles and cultures. Context of use includes different physical environments (lighting, thermal condition), tasks involved in and social and organizational environments.

Annex A presents disabilities of human sensory, physical and cognitive abilities, and their consequences, as well as aging effects.

4.1.2 Use of alternative or multiple means of presentation

Information and marking on packaging should be presented with at least two different means of presentation for users who are unable to obtain some information due to their disabilities. Whenever possible, multiple means of presentation should be employed to increase accessibility. Different means include different sensory inputs/outputs, different modes of presentation within the same sensory ability, e.g. colours and symbols, and different methods of presentation, e.g. printed letters and audio information.

The following considerations may apply but are not restricted to the following:

— represent some or a whole part of the printed visual information by tactile or auditory information;

EXAMPLE 1 Braille used on medicinal packaging to present some of the printed information (see ISO 17351).

— use colour information additionally to discriminate the different meanings of visual information merely expressed by letters and symbols, or vice versa;

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