

INTERNATIONAL STANDARD

ISO
11683

Second edition
1997-10-01

Corrected and reprinted
1998-09-01

Packaging — Tactile warnings of danger — Requirements

Emballages — Indications tactiles de danger — Exigences



Reference number
ISO 11683:1997(E)

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 11683 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 122, *Packaging*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 11683:1993), which has been technically revised.

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Printed in Switzerland

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Foreword

The text of EN ISO 11683:1997 has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 122 "Packaging".

This European Standard supersedes EN 272:1989.

The significant technical differences are the following :

- addition of reduced size of symbol.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 1998, and conflicting national standards shall be withdrawn at the latest by April 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

0 Introduction

When blind and visually handicapped persons handle a package, it is difficult or impossible for them to ascertain whether it contains harmless or dangerous substances or preparations.

This problem may be solved by :

- providing packages which contain dangerous substances or preparations, with a tactile warning of danger in accordance with this standard ;
- teaching blind and visually handicapped persons the meaning and the positioning of the tactile warning of danger on the package.

This standard specifies a tactile warning which in its form is normally a raised equilateral triangle, reduced to 3 raised dots where there is not enough space on the package for the triangle.

For blind and visually handicapped persons, the tactile warning of danger is simple in its presentation, is as constant as possible in its location, makes the teaching and learning process easy and provides a guarantee of recognition.

1 Scope

This standard specifies the requirements for a tactile warning of danger on packagings which contain certain dangerous substances and preparations.

To prevent confusion in interpretation, the tactile warning of danger is affixed only on packages covered by the regulations in force on the dangerous substances and preparations.

This standard does not specify the dangerous substances and preparations to be contained in packagings with a tactile warning of danger. These are to be specified by legislative authorities.

2 Normative references

This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 417	1992	Non - refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances - Construction, inspection, testing and marking.
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3 Definitions

For the purposes of this standard, the following definitions apply :

3.1 dangerous

Description specified by legislative authorities for certain substances (see 3.1.1) and preparations (see 3.1.2).

3.1.1 substances

Chemical elements and their compounds as they occur in the natural state or as produced by industry.

3.1.2 preparations

Mixtures or solutions composed of two or more substances.

3.2 packaging

Any form of container in which substances or preparations are directly packaged.

NOTE: The term Packaging is used throughout in the restricted sense of primary packaging, excluding any secondary packaging or wrapping.

3.3 package

Packaging with its contents.

3.4 bottom

Normal standing surface of packaging.

3.5 handling surface

That part of the packaging which is touched by the user during normal use, viz, picking up and/or handling when opening and emptying the contents of the package.

3.6 edge

Zone where the upright surface(s) and the bottom meet.

4 General requirements

The tactile warning of danger shall be placed on the packaging and not on any secondary packaging, such as a cardboard box protecting a glass bottle, so that it can be felt prior to fully opening the package.

The requirements laid down in clauses 5, 6, 7 and 8 shall be fulfilled.

5 Requirements for the tactile warning

The symbols described in clauses 6 and 7 are deemed to be tactile warnings of danger.

This applies equally to warnings which are an integral part of the packaging or presented otherwise, e.g. on an adhesive label or attached to the packaging.

6 Symbol dimensions

6.1 General

The normal symbol (6.2) shall be used where physically possible. The reduced size 9 mm symbol (6.3.1) shall be used only where application of the normal symbol is not physically possible. The 3 dots symbol (6.3.2) shall be used only where application of the 9 mm symbol is not physically possible. The 3 mm symbol (6.3.3) shall be used only where application of the 3 dots symbol is not physically possible.

6.2 Normal size

The symbol shall be an equilateral triangle with corners as sharp as possible (see figure 1).

At the corners, the sides shall be joined where practicable, if not, no more than 1,0 mm apart.

The length L of the side shall be $18 \text{ mm} \pm 2 \text{ mm}$.

The triangle shall consist of a frame, of which the width B shall be $1,7 \text{ mm} \pm 0,2 \text{ mm}$.

The height H of the frame cross section shall be between $0,25 \text{ mm}$ and $0,5 \text{ mm}$.

The minimum area of the cross section of the frame shall be $1/2 H \times B$, and the shape of the cross section may for example be rectangular (see section AA in figure 1) or curved.

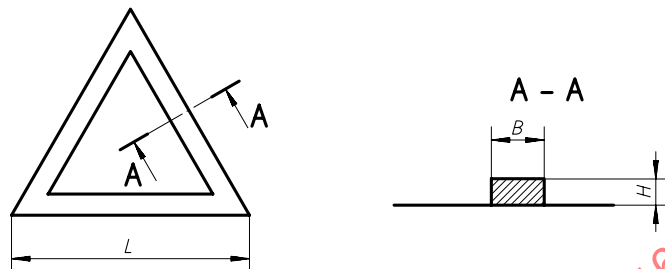


Figure 1 : Tactile symbol of warning

6.3 Reduced size

Three symbols of reduced dimensions, may be used.

6.3.1 The 9 mm symbol

The symbol shall be an equilateral triangle with corners as sharp as possible (see figure 1). This symbol may be frame or filled.

At the corners, the sides shall be joined where practicable, if not, no more than $1,0 \text{ mm}$ apart.

The length L of the side shall be $9 \text{ mm} \pm 1 \text{ mm}$.

The triangle, when frame only, shall have a width B of $1 \text{ mm} \pm 0,2 \text{ mm}$.

The height H of the frame cross-section shall be between $0,25 \text{ mm}$ and $0,5 \text{ mm}$.

The minimum area of the cross-section of the frame shall be $1/2 H \times B$, and the shape of the cross section may for example be rectangular (see section AA in figure 1) or curved.

If the triangle is filled then the height and the contour of the perimeter shall be as established for a frame.

6.3.2 The 3 dot symbol

The 3 dots - each with a truncated cone shape - shall be equally spaced on a circle (see figure 2).

The diameter of each dot shall be $2 \text{ mm} \pm 0,2 \text{ mm}$.

The height H of the section shall be between $0,25 \text{ mm}$ and $0,5 \text{ mm}$.

The distance D between any 2 dots - centre to centre - shall be equal and between 3 mm and 9 mm.

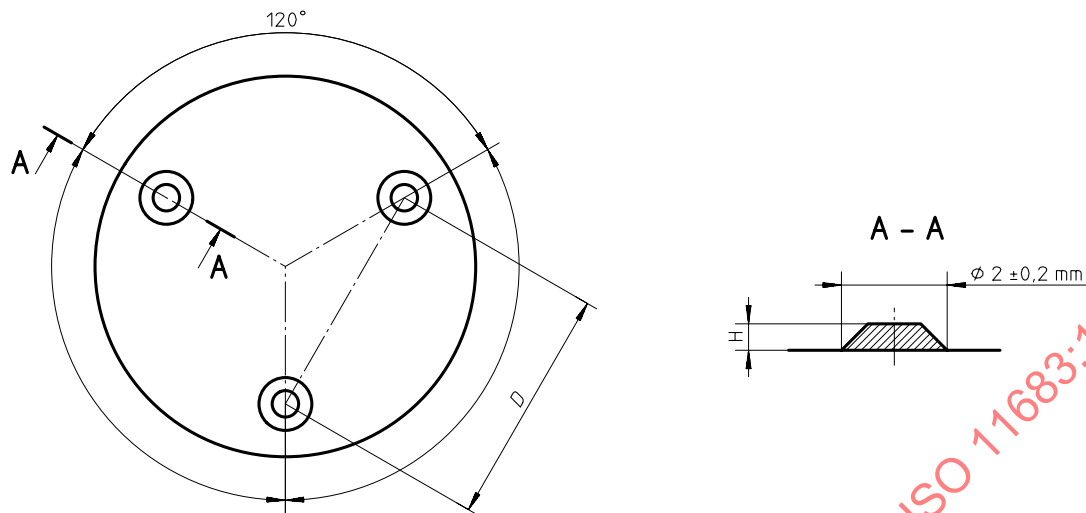


Figure 2 : 3 dot symbol for tactile warning of danger

6.3.3 The 3 mm symbol

The triangle shall be an equilateral triangle with corners as sharp as possible (see figure 1). This symbol shall be filled.

The length L of the side shall be (3^{+1}_0) mm (not less than 3 mm and not more than 4 mm).

The height H of the frame cross section shall be between 0,25 mm and 0,5 mm.

7 Location of the tactile warning of danger

7.1 General requirements

The tactile warning of danger shall be located in such a way that any other embossed patterns do not cause confusion.

7.2 Packaging with bottom

7.2.1 General case

Each entire symbol for tactile warning of danger shall be located on the upright handling surface near the edge within the range indicated in figure 3, such that the top of the triangle is not more than 50 mm from the bottom of the packaging.

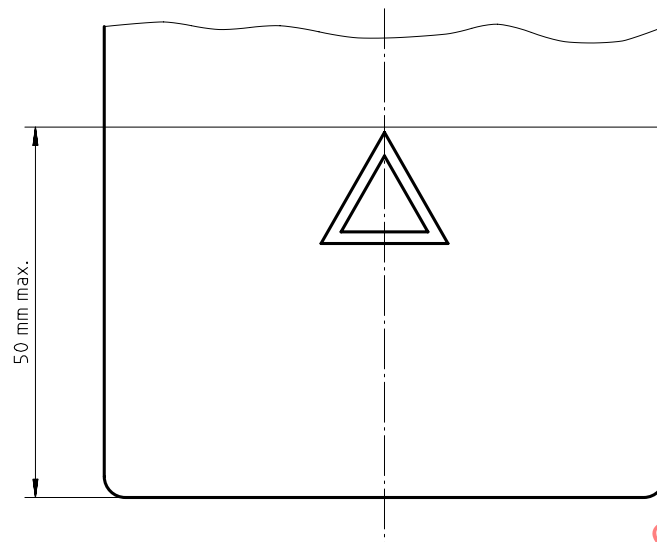


Figure 3 : Location of the tactile warning of danger on packaging with bottom

7.2.2 Specific cases

7.2.2.1 General

For the following packaging, the tactile warning of danger shall be located as specified below unless this is technically impossible. Otherwise the general requirements as in 7.2.1 shall apply.

7.2.2.2 Packaging of aerosols

The tactile warning of danger shall be located on that surface of the packaging of aerosols where the finger is placed to actuate the aerosol. This surface (the actuator button or spray through overcap) shall be an integral part of the aerosol packaging and not one which is removed during the normal use of the product.

7.2.2.3 Containers for combustible gas

For gas containers of which the content can be used only while specific connections or fittings are attached, the tangible characteristics of these connections or fittings shall be considered to be a tactile warning of danger.

For hermetically sealed gas containers of which the shape of the top complies with the provisions of EN 417, the tangible characteristics of the shape shall be considered to be a tactile warning of danger.

7.2.2.4 Plastic packaging with a full opening (injection process)

The tactile warning shall be located on the handling surface as near as possible to the opening.