

SLOVENSKI STANDARD oSIST prEN 17885:2022

01-september-2022

Dodatki za sveče - Specifikacija za oznake za požarno varnost in varnost izdelkov

Candle Accessories - Specification for fire safety and product safety labels

Kerzenzubehör - Spezifikation für die Feuersicherheit und Produktsicherheitskennzeichnung

Accessoires pour bougies - Spécification relative à la sécurité incendie et étiquetages de sécurité du produit

Ta slovenski standard je istoveten z: prEN 17885

ICS:

13.220.40	Sposobnost vžiga in obnašanje materialov in proizvodov pri gorenju	Ignitability and burning behaviour of materials and products
71.100.99	Drugi proizvodi kemijske industrije	Other products of the chemical industry

oSIST prEN 17885:2022 en,fr,de

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN 17885

July 2022

ICS 13.220.40; 71.100.99

English Version

Candle Accessories - Specification for fire safety and product safety labels

Kerzen - Spezifikation für die Feuersicherheit und Produktsicherheitskennzeichnung von Kerzenzubehör

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation. 18/08/151-17885-2022

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European foreword

This document (prEN 17885:2022) has been prepared by Technical Committee CEN/TC 369 "Candle fire safety", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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Introduction

Candles have accompanied humankind for more than 2 000 years serving above all as a light source. Closely connected to the development history of the candle are the efforts made to improve its quality and its safety in use. As the function as decoration and not only as light source has increased, the causes of fires are often connected to inappropriate candle accessories and to inappropriate use by the consumer which have led to consumer concern for these issues.

This document helps to ensure a reasonable degree of safety during use, thereby improving personal safety and reducing the risk of fires, deaths and injuries.

However, products complying with this document cannot be considered to be totally safe. It is unrealistic to expect that the risks of all combinations of accessories and candles can be anticipated. If a risk assessment shows that other combinations are reasonably foreseeable, then further tests that are not specified in this document can be carried out to evaluate the fire safety of the accessory.

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1 Scope

This document specifies requirements and test methods for the fire safety of candle accessories, as well as safety information and requirements on how safety information will be displayed.

The safety requirements and test methods specified in this document are intended to cover the most common risks.

This document does not specify requirements or test methods for uncommon risks arising from the unforeseen combination of accessories and candles.

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.

EN 15493:2019, Candles - Specification for fire safety

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1

barrier technology

functional design element of a candle accessory that minimizes the risk of ignition of the combustible components of the candle accessory as a result of foreseeable misuse or failure of the candle

Note 1 to entry: Examples of barrier technologies are containers, inlets, plates, etc. of non-combustible material (such as glass, metal, ceramics, etc.) with combustible material surrounding or below.

[SOURCE: ASTM F 2601-18, 3.3.1, modified]

3.2

candle

one or more combustible wicks supported by a material that constitutes a fuel, which is solid or semisolid at room temperature (20 $^{\circ}$ C to 27 $^{\circ}$ C) with the main function of sustaining a light-producing flame, including any coatings on and articles or substances in the fuel

[SOURCE: EN 15426:2018, 3.2]

3.3

candle accessory

object designed, intended or marketed for use with a candle

[SOURCE: ASTM F 2601-18, 3.2.1]

3.4

candle burner

candle holder that restricts the free flow of exiting combustion gases

Note 1 to entry: Candle burners include, but are not limited to, lanterns and warming units.

[SOURCE: ASTM F 2601-18, 3.2.2, modified – Note 1 to entry has been added]

3.5

candle holder

candle accessory onto or into which a candle is placed

[SOURCE: ASTM F 2601-18, 3.2.3, modified – "or into" was added to the definition]

3.6

candle ring

candle accessory intended to surround the candle with decorative materials in proximity to a candle, including, but not limited to, a continuous ring or loose fill material

[SOURCE: ASTM F 2601-18, 3.2.4]

3.7

container candle

candle that is produced and used in the same container

Note 1 to entry: This definition includes tea lights.

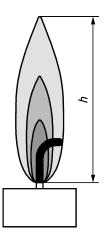
[SOURCE: EN 15426:2018, 3.3]

3.8

flame height

vertical distance between the base of the flame and the top of the flame

Note 1 to entry: The base of the flame is not always visible. In such cases, the point where the wick colour changes from light to dark is considered the base of the flame for measuring the flame height. See Figure 1.



Key

h flame height

Figure 1 — Flame height

[SOURCE: EN 15493:2019, 3.7]

3.9

product safety label

label on a product that informs the observer of one or more potential hazards and describes the safety precautions and/or actions required to avoid the hazard(s)

Note 1 to entry: It communicates a hazard, a hazardous situation, a precaution to avoid a hazard and/or a result of not avoiding a hazard.

[SOURCE: ISO 3864-2:2016, 3.9]

3.10

shade

candle accessory placed above the candle, whose function is to modify light from the flame and change the appearance of the candle

[SOURCE: ASTM F 2601-18, 3.2.7]

3.11

supplementary safety information

safety information symbol or safety information text whose main purpose is to provide additional clarification

Note 1 to entry: A supplementary safety information panel typically communicates hazard consequence or hazard avoidance information.

[SOURCE: ISO 3864-2:2016, 3.15, modified – last word "panel" was deleted from the term]

3.12

sustained flaming

existence of flame on or over the surface of the specimen for periods of 4 s or more

[SOURCE: ASTM F 2601-18, 3.3.9]

3.13

topper

vented candle accessory, which is placed directly on top of a container candle, to modify airflow

[SOURCE: ASTM F 2601-18, 3.2.8]

3.14

warming unit

candle burner with reservoir intended to hold beverages, food or extraneous material that is heated by one or more candles

Note 1 to entry: Extraneous material includes e.g. fragrance oils, wax melts, etc.

4 Safety requirements

4.1 Flammability

When tested in accordance with 9.1 the accessory shall have a burn time of less than or equal to an average of 30 s for three tests per component and the burn time for any one test shall not exceed 60 s. Flames shall not spread over the entire accessory.

Birthday cake candle holders that can hold only one candle and do not contain pyrotechnics are exempted from this requirement.

4.2 Stability

When tested in accordance with 9.2 the accessory and the used candle(s) shall not tip over when placed at a $(10 \pm 0.2)^{\circ}$ incline from horizontal when tested with the candle(s) specified in 9.3.

4.3 Fire safety

When tested in accordance with 9.3 the candle shall exhibit no secondary ignition for more than 10 s and the flame height of all candle types, except tea lights, shall not exceed 75 mm. The flame height of tea lights shall not exceed 30 mm. Candle containers shall not crack or break at any time throughout the burning test. The candle accessory shall not break, crack or catch fire as a result of the test.

4.4 Surface temperature

4.4.1 General iTeh STANDARD PREVIEW

The decision which surface temperature requirements apply to which parts shall be based on a risk assessment.

4.4.2 Parts intended to be touched

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Any part of the candle accessory which the consumer is intended to touch as indicated by design or instructions when lifting, moving, opening or holding the product shall be below the temperature limit for 4 s specified in 4.4.5, Table 1 when tested according to 9.4.

NOTE Examples of parts intended to be touched could be doors on lanterns where the user needs to touch a locking mechanism to open the door, removable tops on lanterns necessary to take away to extinguish a burning candle, or handles on accessories intended to be moved.

4.4.3 Parts likely to be touched unintentionally

Any part of the candle accessory which the consumer is likely to touch unintentionally shall be below the temperature limit for 1 s specified in 4.4.5, Table 1 when tested according to 9.4.

NOTE Examples of parts likely to be touched unintentionally could be the opposite of a door, a decorative handle for a product not intended to be moved, or the exterior sides of accessories without handles.

4.4.4 Parts likely to come into contact with other materials

The supporting surface of the candle accessory which is likely to come into contact with other materials during reasonably foreseeable use, e.g. the base, hook or hanging system, shall not reach such a high temperature that it could pose a fire risk or cause deformation of materials on which it is supported or hung from.

During the test with a burning candle, the temperature of such surfaces shall not exceed 80 °C when tested according to 9.4.