



SLOVENSKI STANDARD

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Nadomešča:

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Pirotehnični izdelki - Ognjemetni izdelki, kategorije 1, 2 in 3 - 2. del: Kategorije in vrste ognjemetnih izdelkov

Pyrotechnic articles - Fireworks, Categories 1, 2, and 3 - Part 2: Categories and types of firework

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Pyrotechnische Gegenstände - Feuerwerkskörper, Kategorien 1, 2 und 3 - Teil 2: Kategorien und Arten von Feuerwerk

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Articles pyrotechniques - Artifices de divertissement, Catégories 1, 2, et 3 - Partie 2: Catégories et types d'artifices de divertissement

Ta slovenski standard je istoveten z: EN 15947-2:2010

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71.100.30 Eksplozivi. Pirotehnika Explosives. Pyrotechnics

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

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ICS 71.100.30

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English Version

Pyrotechnic articles - Fireworks, Categories 1, 2, and 3 - Part 2: Categories and types of firework

Articles pyrotechniques - Artifices de divertissement,
Catégories 1, 2, et 3 - Partie 2: Catégories et types
d'artifices de divertissement

Pyrotechnische Gegenstände - Feuerwerkskörper,
Kategorien 1, 2 und 3 - Teil 2: Kategorien und
Feuerwerkstypen

This European Standard was approved by CEN on 21 August 2010.

CEN 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 Management Centre or to any CEN 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 CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Foreword

This document (EN 15947-2:2010) has been prepared by Technical Committee CEN/TC 212 “Pyrotechnic articles”, the secretariat of which is held by NEN.

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 March 2011, and conflicting national standards shall be withdrawn at the latest by March 2011.

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

This document supersedes EN 14035-2:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard is one of the series of standards as listed below:

- iTeh STANDARD PREVIEW**
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- EN 15947-1, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 1: Terminology*
 - EN 15947-2, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 2: Categories and types of firework*
 - EN 15947-3, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 3: Minimum labelling requirements*
 - EN 15947-4, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 4: Test methods*
 - EN 15947-5, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 5: Requirements for construction and performance*

CEN/TC 212 is currently also developing European Standards for:

- Pyrotechnic articles — Fireworks Category 4;
- Pyrotechnic articles — Theatrical pyrotechnic articles;
- Pyrotechnic articles — Pyrotechnic articles for vehicles;
- Pyrotechnic articles — Other pyrotechnic articles.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

EN 15947-2:2010 (E)**1 Scope**

This European Standard establishes a system for dividing fireworks into categories and types. It is applicable to fireworks in categories 1, 2 and 3.

2 Normative references

The following referenced documents are indispensable for the application 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 15947-1:2010, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 1: Terminology*

EN 15947-3, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 3: Minimum labelling requirements*

EN 15947-5:2010, *Pyrotechnic articles — Fireworks, Categories 1, 2 and 3 — Part 5: Requirements for construction and performance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15947-1:2010 apply.

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4 Categories

Fireworks are subdivided into categories as follows: [SIST EN 15947-2:2010
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- **category 1:** fireworks which present a very low hazard and negligible noise level and which are intended for use in confined areas, including fireworks which are intended for use inside domestic buildings;
- **category 2:** fireworks which present a low hazard and low noise level and which are intended for outdoor use in confined areas;
- **category 3:** fireworks which present a medium hazard, which are intended for outdoor use in large open areas and whose noise level is not harmful to human health.

5 Category 1**5.1 List of articles which fall into category 1**

The following articles (i.e. types of firework) fall into category 1, when meeting the requirements in EN 15947-3 and EN 15947-5 for category 1:

- Bengal flames;
- Bengal matches;
- Bengal sticks;
- Christmas crackers;

- crackling granules;
- flash pellets;
- fountains;
- ground spinners;
- hand-held sparklers;
- non-hand-held sparklers;
- novelty matches;
- party poppers;
- serpents;
- snaps;
- table bombs;
- throwdowns.

5.2 List of articles which do not fall into category 1

Articles (i.e. types of firework) that do not fall into category 1, are for example:

- aerial wheels;
- bangers;
- batteries and combinations;
- double bangers;
- flash bangers;
- ground movers;
- jumping crackers;
- jumping ground spinners;
- mines;
- mini rockets;
- rockets;
- Roman candles;
- shot tubes;
- spinners;

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EN 15947-2:2010 (E)

— wheels.

5.3 Procedure to determine whether an article falls into category 1

This procedure shall be used when a new article is presented, which does not fall into one of the types listed in 5.1.

The following questions in Table 1 shall be answered in the order given. To fall into category 1, an article shall have a negative answer to all the questions. If one answer is "Yes" the article does not fall into category 1.

Table 1 — Questions for articles that are not in category 1

Question	Answer
1) Is the article in the list of excluded articles (see 5.2)?	Yes → not in category 1
2) Does the article resemble a toy or food?	Yes → not in category 1
3) Does the sound pressure level exceed 120 dB(A _{imp}) at the safety distance of category 1 fireworks?	Yes → not in category 1
4) Is debris, burning, or incandescent matter projected laterally more than the safety distance of category 1 fireworks?	Yes → not in category 1
5) Does the article, or parts of it, move outside the safety distance of category 1 fireworks from the testing point?	Yes → not in category 1
6) Does the article lift from the ground by more than 0,5 m?	Yes → not in category 1

6 Types of firework

Fireworks are further subdivided into various types, as described in Table 2.

Table 2 — Types of firework

Type name	Brief description	Principal effect(s)
aerial wheel soucoupe volante Steigende Krone	tubes containing propellant charges and sparks-, flame- and/or noise-producing pyrotechnic compositions, the tubes being fixed to a supporting structure	rotation and ascent, with emission of sparks and flames, producing a visual and/or aural effect in the air
banger pétard à mèche Knallkörper	non-metallic case containing black powder	report
banger: see also 'double banger', 'flash banger'	-	-
battery batterie Batterie	assembly including several elements, each of the same type and corresponding to one of the types of firework listed in this part of EN 15947 and in accordance with 4.3 of EN 15947-5:2010, with one or two points of ignition	as for the individual elements
Bengal flame feu de Bengale Bengalfeuer	tube containing slow-burning pyrotechnic composition https://standards.iteh.ai/catalog/standards/sist/ab147206-0cf8-4b1a-a6a9-50675f73e171/sist-en-15947-2-2010	emission of coloured flame