
Pirotehnični izdelki - Ognjemetni izdelki, kategorija F4 - 4. del: Minimalne zahteve za označevanje in navodila za uporabo

Pyrotechnic articles - Fireworks, Category F4 - Part 4: Minimum labelling requirements and instructions for use

Pyrotechnische Gegenstände - Feuerwerkskörper, Kategorie F4 - Teil 4: Mindestanforderungen an die Kennzeichnung und Gebrauchsanweisung

Articles pyrotechniques - Artifices de divertissement, Catégorie F4 - Partie 4: Exigences minimales d'étiquetage et documentation utilisateur

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**Pyrotechnic articles - Fireworks, Category F4 - Part 4:
Minimum labelling requirements and instructions for use**

Articles pyrotechniques - Artifices de divertissement,
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Pyrotechnische Gegenstände - Feuerwerkskörper,
Kategorie 4 - Teil 4: Mindestanforderungen an die
Kennzeichnung und Gebrauchsanweisung

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 212.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 16261-4:2021) has been prepared by Technical Committee CEN/TC 212 “Pyrotechnic articles”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16261-4:2012.

In comparison with the previous edition, the following technical modifications have been made:

- To clause 4.3 the following statement has been added: “The labelling of the firework shall also include as a minimum the following: product, batch or serial number”.
- Clauses 4.8 and 4.9 have been technically revised.
- To clause 4.11.1 the following statement has been added: “Standard minimum safety distance(s) shall be stated on the label in accordance to the national regulations and standard conditions (such as vertical shot and no wind).”

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 Directive 2013/29/EU on the harmonisation of the laws of the Member States relating to the making available on the market of pyrotechnic articles.

For relationship with Directive 2013/29/EU, see informative Annex ZA, which is an integral part of this document.

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1 Scope

This document specifies the minimum labelling requirements and the mandatory instructions for use for category F4 fireworks.

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 16261-1:—,¹ *Pyrotechnic articles - Fireworks, category F4 - Part 1: Terminology*

EN 16261-2:—,² *Pyrotechnic articles — Fireworks, Category F4 — Part 2: Requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16261-1:—¹ 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>

4 Minimum labelling requirements

4.1 General

Fireworks shall be marked with the minimum information specified in 4.2 to 4.12.

Conformity to the requirements specified in 4.1 to 4.12 shall be verified by visual examination.

The specified information shall be given in the official language(s) of the member state in which the firework is placed on the market.

For each language, the minimum specified information shall be presented as a whole and shall not be interrupted by other text. Additional text given in any language shall not conflict with the above specified information.

4.2 Name and type of firework

Labels to be provided directly on the article (or on the smallest piece of packaging if the article does not provide sufficient space for the labelling requirements) shall include the subtype (or generic type if the article does not belong to a subtype) (see prEN 16261-1), plus a concise designation of the field of use whenever it is necessary to ensure a safe and correct use of the article.

EXAMPLE “Shell” or “Bengal flame” or “Shell in mortar”.

¹ Under preparation. Stage at the time of publication: prEN 16261-1:2021.

² Under preparation. Stage at the time of publication: prEN 16261-2:2021.

If a trade name is used in addition to the type name, it shall not conflict with the principal effects of the relevant type of firework or with the name of another generic or subtype of firework.

4.3 Category, registration number, product, batch or serial numbers

The registration number for tracing products shall be marked in accordance with the example below:

XXXX - F4 - ZZZZ...

where **XXXX** refers to the identification number of the notified body issuing the EU-type examination certificate, F4 meaning category F4 firework according to the Directive 2013/29/EU Article 3 (1) (a), and where **ZZZZ...** is a processing number given by the notified body.

The labelling of the firework shall also include as a minimum the following: product, batch or serial number.

4.4 Identification number of the notified body

CE-marking is followed by the identification number of the Notified Body responsible for:

- monitoring the existing quality system (in case of Modules D, E, and H); and/or
- checking conformity to type according to Module C2 where the notified body intervened during the manufacturing phase.

4.5 Net explosive content

The labelling shall include the net explosive content of the firework.

The abbreviation for the net explosive content (NEC) may be used for the labelling.

4.6 Safety and disposal information

The safety and disposal information provided in the instructions for use shall be readily available.

The following sentence *“For use only by persons with specialist knowledge”* shall be printed on the label and emphasized by use of a heading, or bold type, or similar.

4.7 Year of production

The year of production shall be printed on the label, either by 4 or 2 digits, e.g. “2020” or “20”.

4.8 Details on manufacturer or importer

The labelling of the firework shall include as a minimum the following information about the manufacturer: name, registered trade name or registered trade mark and the postal address at which they can be contacted.

Where the manufacturer is not established in the Union, as a minimum the following information about the manufacturer and the importer: name, registered trade name or registered trade mark and the postal address at which they can be contacted.

4.9 Printing

Labelling shall be visibly, legibly and indelibly in the official language(s) of the Member State in which the pyrotechnic article is made available to the consumer (person with specialized knowledge for category F4 firework). Such labelling shall be clear, understandable, intelligible and on a contrasting background. The CE marking should be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008.

4.10 Marking of very small items

If the firework does not provide enough space to carry all the specified information, at least the registration number and the CE-marking (followed by the identification number of the notified body (see 4.4)) and the manufacturer's details or, if the manufacturer is not established in the European Union, the importer's details shall be given on the firework, if at all possible.

In this case, other information will be given on a protective pack label and the firework shall be supplied only in this protective pack. Where the information printed on the protective pack might be affected by the opening of the pack, the manufacturer will ensure that the pack design prevents loss of information when the label is broken. The protective pack shall be marked with the statement: "Must be supplied as packaged". This statement shall appear adjacent to the type name or category.

4.11 Minimum safety information

4.11.1 General

Standard minimum safety distance(s) shall be stated on the label. These should comply with national regulations and standard conditions (such as vertical shot and no wind).

The following information shall be printed additionally on the label: "*Minimum safety distance to be determined by user according to the supplied product data*" and "*Article to be used in accordance with written instructions and national regulations*".

4.11.2 Mandatory parameters

For every generic type, the following parameter shall be printed, if applicable (see Annex A):

- A Effect height or burst height according to the generic type.
- B Maximum A-weighted impulse sound pressure level (in dB(A)) max at x m, where x is the distance at which the sound level was measured), according to EN 16261-2:—², 7.2.5.
- C Debris (distance to which dangerous debris can be projected);
- D Information on incandescent and/or burning matter. If incandescent and/or burning matter return to the level from which the device was fired, the D box shall be appropriately marked with a "✓".
- E Range (distance between the firing point and the point of explosion onto the water for aquatic fireworks).
- R Overall duration for aerial wheels.
- W Maximum firing angle if the angles of the tubes are not visible.

The above-mentioned parameters are necessary for calculating the safety distances and shall be given in one text box on the label.

Every value shall be displayed in SI units (International System of Units).

4.11.3 Format

The effect parameters as stated above shall be placed in the order of appearance above, according to the following format:

X: Y

where

X is the parameter A, B, C, D, E, R or W;

Y is the numerical value of the parameter with its unit or an appropriate mark (for example: ✓ or -).

Additional optional parameters as defined in Annex A may be printed on the label, as long as they are kept separate from the mandatory parameters and the coding, if used, is compliant with Annex A.

4.12 Specific labelling for individual items

4.12.1 Specific labelling requirement for combinations

For combinations equipped with multiple initial fuses, each fuse shall be clearly identified.

If the firing orientation is not apparent from the design of the exterior of the article, then sufficient information about it shall be provided on the label.

For combinations with angled components, the maximum angle of firing shall be displayed on the label.

4.12.2 Specific labelling requirement for shells

In cases where a specific mortar is required by the manufacturer, the following sentence shall be displayed on the label: *“Use specific mortar (see instructions).”*

and information on the specific mortar shall be included in the instructions for use.

4.12.3 Specific labelling requirement for components

For components designed to be placed on the market, the labelling specified in 4.1 to 4.10 applies.

4.13 Additional information

Additional information may be displayed on the labelling or on the instructions for use, provided that this does not conflict with the mandatory information.

5 Operating instructions

Instructions for safe handling, storage, use and disposal shall be supplied by the manufacturer/importer, including information regarding special equipment for use if necessary.

The information as required by 4.11.1 shall be included in the instructions for use.

Annex A (normative)

List of mandatory and optional parameters and corresponding codes

The following Table A.1 applies for the coding of mandatory and optional parameters:

Table A.1 — List of mandatory and optional parameters and corresponding codes

Code	Status ^a	Description	Examples/Comments
A	M/O	Burst height / effect height (whichever is applicable)	Optional for some aquatic fireworks and aerial wheels.
B	M/O	Sound pressure level including the measuring distance	Value at a distance
C	M	Projected debris distance	
D	M	If incandescent and/or burning matter reaches ground	“√” if incandescent and/or burning matter reaches ground
E	M/O	Effect range	This parameter is mandatory for aquatic fireworks
F	O	Effect broadness	
G	O	Calibre	If not required in description
H	O	Initial fuse time	Not relevant for electrically ignited items.
I	NOT USED to avoid ambiguity with number “1”		
J	O	Flight time	e.g. Time to burst for shells
K	O	Effect time	e.g. Duration of stars or effects
L	O	Flash powder content	e.g. for compliance with UN default classification (in weight or in %)
M	O	Gross mass	e.g. for calculating storage limits
N	O	Effect	If not explicit in description or name
O	NOT USED to avoid ambiguity with number “0”		
P	O	Classification reference	e.g. CAD reference
Q	O	Drift	e.g. for aerial wheels
R	M/O	Overall duration	M for aerial wheels
S	O	If multiple effects	“√” in case of multiple explosion, followed by the number of explosions
T	O	Radial effect distance	
U	NOT USED to avoid ambiguity with letter “V”		
V	O	Burning rate	
W	M/O	Maximum firing angle	See EN 16261-2:— ² , Clause 5.
^a M = This information is mandatory. O = This information is optional (depending on type or at discretion of manufacturer).			