

**Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.
Osa 2: Katsemeetodid**

**Pyrotechnic articles - Pyrotechnic articles for vehicles -
Part 2: Test methods (ISO 14451-2:2013)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| | |
|---|--|
| See Eesti standard EVS-EN ISO 14451-2:2013 sisaldab Euroopa standardi EN ISO 14451-2:2013 ingliskeelset teksti. | This Estonian standard EVS-EN ISO 14451-2:2013 consists of the English text of the European standard EN ISO 14451-2:2013. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.03.2013. | Date of Availability of the European standard is 20.03.2013. |
| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for Standardisation. |

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English Version

**Pyrotechnic articles - Pyrotechnic articles for vehicles - Part 2:
Test methods (ISO 14451-2:2013)**

Articles pyrotechniques - Articles pyrotechniques pour
véhicules - Partie 2: Méthodes d'essai (ISO 14451-2:2013)

Pyrotechnische Gegenstände - Pyrotechnische
Gegenstände für Fahrzeuge - Teil 2: Prüfverfahren (ISO
14451-2:2013)

This European Standard was approved by CEN on 9 February 2013.

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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-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 14451-2:2013) has been prepared by Technical Committee CEN/TC 212 "Pyrotechnic articles" the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 22 "Road vehicles".

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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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 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.

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

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 14451-2:2013 has been approved by CEN as EN ISO 14451-2:2013 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EC Directive 2007/23/EC on the placing on the market of pyrotechnic articles

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive 2007/23/EC on the placing on the market of pyrotechnic articles.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 2007/23/EC on the placing on the market of pyrotechnic articles (1 of 2)

| Clause(s)/sub-clause(s) of this document | Essential Safety Requirements (ESRs) of Directive 2007/23/EC | Qualifying remarks/Notes |
|--|--|--|
| 4.7, 4.8, 4.9 | (1) | Note: It is taken into account that the intended purpose of the pyrotechnic article is to function in a vehicle in case of accidents |
| 4.1 | (2) | Reference: Directive 2000/53/EC |
| 4.9 | (3) 1st sentence | |
| 4.9 | (3) 2nd and 3rd sentences | Note: It is taken into account that the intended purpose of the pyrotechnic article is to function in a vehicle in case of accidents |
| 4.1 | (3a) | |
| 4.3, 4.4 | (3b) | |
| 4.2, 4.3, 4.5 | (3c) | |
| 4.4 | (3d) | |
| 4.4 | (3e) | |
| 4.3, 4.4 | (3f) | |
| 4.5 | (3g) | |
| 4.1 | (3h) | See also ISO 14451-3 |
| 4.2 | (3i) | |

Table ZA.1 — (2 of 2)

| Clause(s)/sub-clause(s) of this document | Essential Safety Requirements (ESRs) of Directive 2007/23/EC | Qualifying remarks/Notes |
|--|--|--------------------------|
| 4.1 | (3j) | |
| 4.2, 4.3, 4.5 | (3) Last sentence | |
| 4.1 | (4a) | |
| 4.1 | (4b) | |
| 4.1, 4.9 | (5 B.1) | |
| 4.1 | (5 B.2) | |
| 4.5, 4.6 | (5 B.3) | |
| | (5 B.4) | Not applicable |
| 4.7 | (5 C.1) | |
| 4.5 | (5 C.2) | |
| 4.5 | (5 C.3) | |
| | (5 C.4) | Not applicable |
| | (5 C.5) | Not applicable |
| 4.1 | (5 C.6) | |
| 4.5 | (5 C.7) | |

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this part of EN ISO 14451.

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Pyrotechnic articles — Pyrotechnic articles for vehicles —

Part 2: Test methods

1 Scope

This part of ISO 14451 establishes uniform test methods for pyrotechnic articles for vehicles.

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.

ISO 14451-1, *Pyrotechnic articles — Pyrotechnic articles for vehicles — Part 1: Terminology*

ISO 14451-3, *Pyrotechnic articles — Pyrotechnic articles for vehicles — Part 3: Labelling*

ISO 14451-5, *Pyrotechnic articles — Pyrotechnic articles for vehicles — Part 5: Requirements and categorization for airbag gas generators*

ISO 14451-6, *Pyrotechnic articles — Pyrotechnic articles for vehicles — Part 6: Requirements and categorization for airbag modules*

ISO 14451-7, *Pyrotechnic articles — Pyrotechnic articles for vehicles — Part 7: Requirements and categorization for seatbelt pretensioners*

ISO 14451-9, *Pyrotechnic articles — Pyrotechnic articles for vehicles — Part 9: Requirements and categorization for actuators*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14451-1 apply.

NOTE Wherever reference is made to *pyrotechnic article(s)* only *pyrotechnic articles for vehicles* are meant.

4 Test methods

4.1 Verification of design and documentation

The manufacturer shall supply a document which describes the pyrotechnic article. The typical content of the document shall include the following information:

- description of the purpose of the pyrotechnic article;
- sketch with external dimensions;
- total mass of the pyrotechnic article;
- cross section and part list;
- mass and pyrotechnic composition(s) contained in the article;