# Explosives for civil uses — High explosives —

Part 12: Specifications of boosters with different initiating capability

The European Standard EN 13631-12:2004 has the status of a British Standard

ICS 71.100.30



## National foreword

This British Standard is the official English language version of EN 13631-12:2004.

The UK participation in its preparation was entrusted to Technical Committee CII/61, Explosives for civil uses, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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#### Summary of pages

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#### English version

# Explosives for civil uses - High explosives - Part 12: Specifications of boosters with different initiating capability

Explosifs à usage civil - Explosifs - Partie 12 : Détermination de la capacité d'amorçage des relais de détonation Explosivstoffe für zivile Zwecke - Sprengstoffe - Teil 12: Festlegung von Verstärkungsladungen mit unterschiedlicher Zündfähigkeit

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#### **Foreword**

This document (EN 13631-12:2004) has been prepared by Technical Committee CEN /TC 321 "Explosives for civil uses", the secretariat of which is held by AENOR.

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of an identical text or by endorsement, at the latest by May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

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 a series of standards on *Explosives for civil uses - High Explosives*. The other parts of this series are:

| prEN 13631-1  | Part 1: Requirements.                                                   |
|---------------|-------------------------------------------------------------------------|
| EN 13631-2    | Part 2: Determination of thermal stability of explosives                |
| EN 13631-3    | Part 3: Determination of sensitiveness to friction of explosives        |
| EN 13631-4    | Part 4: Determination of sensitiveness to impact of explosives          |
| EN 13631-5    | Part 5: Determination of resistance to water                            |
| EN 13631-6    | Part 6: Determination of resistance to hydrostatic pressure             |
| EN 13631-7    | Part 7: Determination of safety and reliability at extreme temperatures |
| EN 13631-10   | Part 10: Verification of the means of initiation                        |
| EN 13631-11   | Part 11: Determination of transmission of detonation                    |
| EN 13631-13   | Part 13: Determination of density                                       |
| EN 13631-14   | Part 14: Determination of velocity of detonation                        |
| prEN 13631-15 | Part 15: Calculation of thermodynamic properties                        |
| EN 13631-16   | Part 16: Detection and measurement of toxic gases                       |

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## 1 Scope

This document specifies a series of boosters for testing purposes.

#### 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 13857-1:2003, Explosives for civil uses - Part 1: Terminology

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13857-1:2003 apply.

#### 4 Description

Three boosters of different initiating capability are defined by their composition (base explosive type and content), density, mass and diameter.

#### 4.1 Explosive

A pentaerythritol tetranitrate (PETN)-based plastic explosive shall be used.

The PETN content shall be a mass fraction of 82 % to 88 %.

The density of the plastic explosive shall be 1,45 g/cm<sup>3</sup> to 1,55 g/cm<sup>3</sup>.

#### 4.2 Mass and diameter

The boosters shall conform to Table 1.

Table 1 — Mass and diameter

| Туре        | Mass        | Diameter |
|-------------|-------------|----------|
|             | g           | mm       |
| I (small)   | 20 ± 2      | 20 ± 2   |
| II (medium) | 200 ± 20    | 44 ± 4   |
| III (large) | 1 000 ± 100 | 75 ± 7   |

# Annex ZA (informative)

# Relationship between this European Standard and the Essential Requirements of EU Directive 93/15/EEC.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the new approach Directive 93/15 EEC.

Once this standard is cited in the Official Journal of the European Communities 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 confers, within the limits of the scope of this standard, a presumption of conformity with II.1(m) and II.2.A(a) of that Directive and associated EFTA regulations.

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