

**Tsiviilkäibes olevad lõhkeained.
Brisantlõhkeained. Osa 5: Veekindluse
määramine**

Explosives for civil uses - High explosives - Part 5:
Determination of resistance to water

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13631-5:2002 sisaldab Euroopa standardi EN 13631-5:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13631-5:2002 consists of the English text of the European standard EN 13631-5:2002.</p> <p>This document is endorsed on 18.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies a method of determining the resistance to water of cartridged or bulk high explosives for civil uses which are designed to be used for blasting operations in wet conditions.</p>	<p>Scope: This European Standard specifies a method of determining the resistance to water of cartridged or bulk high explosives for civil uses which are designed to be used for blasting operations in wet conditions.</p>
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ICS 71.100.30

Võtmesõnad: che, detonation, explosives, fluid- tightness tests, humidity, hydrolytic resistance, ignitability, ignition test, magazines, materials testing, mining, moisture, resistance, specimen preparation, testing, waterproofness, water-resistance tests, watertightness tests

ICS 71.100.30

English version

Explosives for civil uses - High explosives - Part 5: Determination of resistance to water

Explosifs à usage civil - Explosifs - Partie 5: Détermination
de la résistance à l'eau

Explosivstoffe für zivile Zwecke - Sprengstoffe - Teil 5:
Bestimmung der Wasserfestigkeit

This European Standard was approved by CEN on 11 July 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 13631-5:2002) 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 March 2003, and conflicting national standards shall be withdrawn at the latest by March 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 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.*
- prEN 13631-3 *Part 3: Determination of sensitiveness to friction of explosives.*
- EN 13631-4 *Part 4: Determination of sensitiveness to impact of explosives.*
- EN 13631-6 *Part 6: Determination of resistance to hydrostatic pressure.*
- prEN 13631-7 *Part 7: Determination of safety and reliability at extreme temperatures.*
- prEN 13631-10 *Part 10: Method for the verification of the means of initiation.*
- prEN 13631-11 *Part 11: Determination of transmission of detonation.*
- prEN 13631-12 *Part 12: Determination of the initiating capability of boosters.*
- prEN 13631-13 *Part 13: Method for the determination of density.*
- prEN 13631-14 *Part 14: Method for the determination of velocity of detonation.*
- prEN 13631-15 *Part 15: Calculation of thermodynamic properties.*
- prEN 13631-16 *Part 16: Detection and measurement of toxic gases.*

Annex A of this document is informative.

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

1 Scope

This European Standard specifies a method of determining the resistance to water of cartridge or bulk high explosives for civil uses, which are designed to be used for blasting operations in wet conditions.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

prEN 13631-10:2000, *Explosives for civil uses – High explosives – Part 10: Method for the verification of the means of initiation*.

prEN 13631-14, *Explosives for civil uses – High explosives – Part 14: Method for the determination of velocity of detonation*.

prEN 13857-1:2001, *Explosives for civil uses – Part 1: Terminology*.

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:1999)*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 13857-1:2001 apply.

4 Preliminary test for cartridge explosives

4.1 General

Unless the manufacturer claims that the explosive composition is inherently water resistant, the cover material shall be subjected to this preliminary test.

4.2 Apparatus

4.2.1 V-shaped guide, made from aluminium or similar material, of length at least 500 mm longer than the length of the cartridge under test (see Figure 1). The guide shall have a series of holes, spaced 2 mm apart in the direction at right angles to the axis of the guide, for the pin (see 4.2.2). The holes shall be located approximately 500 mm from end 'B' of the guide and at least the length of the cartridge from end 'A'.

4.2.2 Pin, made of stainless steel with a cone angle of 45° and a height of 5 mm (see Figure 2).