

**Tsiviilkäibes olevad lõhkeained.
Brisantlõhkeained. Osa 3: Lõhkeainete
hõõrdetundlikkuse määramine**

Explosives for civil uses - High explosives - Part 3:
Determination of sensitiveness to friction of
explosives

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13631-3:2004 sisaldab Euroopa standardi EN 13631-3:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13631-3:2004 consists of the English text of the European standard EN 13631-3:2004.</p> <p>This document is endorsed on 23.11.2004 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>
--	---

<p>Käsitlusala: This European Standard specifies a method for determining the sensitiveness to friction of explosives. This method is not applicable to liquid products.</p>	<p>Scope: This European Standard specifies a method for determining the sensitiveness to friction of explosives. This method is not applicable to liquid products.</p>
---	---

ICS 71.100.30

Võtmesõnad: definition, definitions, detonation, explosions, explosives, friction, frictional behaviour, loading, magazines, materials testing, mining, propellants, specimen preparation, stability, testing, testing devices, thermal properties of materials, thermodynamic pr

ICS 71.100.30

English version

Explosives for civil uses - High explosives - Part 3: Determination of sensitiveness to friction of explosives

Explosifs à usage civil - Explosifs - Partie 3 : Détermination
de la sensibilité au frottement des explosifs

Explosivstoffe für zivile Zwecke - Sprengstoffe - Teil 3:
Bestimmung der Reibempfindlichkeit von Explosivstoffen

This European Standard was approved by CEN on 21 June 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle.....	4
5 Preparation of test samples.....	4
5.1 Solid substances which are easily broken up or in powdered form	4
5.2 Plastic-bonded substances and other solids which are not easily broken up	5
5.3 Paste-like and gel-type substances	5
6 Apparatus	5
6.1 General.....	5
6.2 Loading device.....	5
6.3 Movable carriage.....	7
6.4 Porcelain plates	7
6.5 Motor and gearing.....	8
7 Procedure	8
8 Test report	10
Annex A (informative) Range of applicability of the test method	11
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 93/15/EEC.....	12

Foreword

This document (EN 13631-3:2004) 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 February 2005, and conflicting national standards shall be withdrawn at the latest by February 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 document 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 13631-4	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
prEN 13631-12	Part 12: Specification of boosters with different initiating capability
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

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

1 Scope

This document specifies a method for determining the sensitiveness to friction of explosives. This method is not applicable to liquid products.

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*

EN 60672-3:1997, *Ceramic and glass insulating materials — Part 3: Specifications for individual materials (IEC 60672-3:1997)*

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 document, the terms and definitions given in EN 13857-1:2003 and the following apply.

3.1 reaction

occurrence of report, crackling, sparking and/or flame

3.2 sensitiveness to friction

lowest load at which a reaction is obtained from at least one out of six trials

4 Principle

A small amount of the explosive is placed on a porcelain plate and a porcelain peg is pressed onto the sample under a specified load. The plate is moved to apply a friction stimulus to the sample. The load is reduced for subsequent trials until the lowest load at which a reaction is obtained from at least one out of six trials is reached.

5 Preparation of test samples

5.1 Solid substances which are easily broken up or in powdered form

Granular substances shall be passed through a sieve with a nominal aperture size of 0,5 mm.

Substances which have been compressed, cast or otherwise consolidated shall be broken into small pieces before sieving. The fraction which passes through the sieve shall be used for the test.

For substances which contain more than one constituent, the sieve fraction used for the test shall be representative of the original sample.