# Plahvatusohtlikud keskkonnad. Plahvatuste vältimine ja kaitse plahvatuste eest. Tolmu/õhu segude minimaalse süttimiskontsentratsiooni määramine

Potentially explosive atmospheres - Explosion prevention and protection - Determination of minimum ignition energy of dust/air mixtures



# EESTI STANDARDI EESSÕNA

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13821:2003 sisaldab Euroopa standardi EN 13821:2002 ingliskeelset teksti.	This Estonian standard EVS-EN 13821:2003 consists of the English text of the European standard EN 13821:2002.
Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

# Käsitlusala:

This European Standard specifies a method of test to determine the minimum ignition energy of a dust/air mixture by an electrically-generated spark

# Scope:

This European Standard specifies a method of test to determine the minimum ignition energy of a dust/air mixture by an electrically-generated spark

**ICS** 13.230

**Võtmesõnad:** conglomerates, definition, definitions, dust explosions, electric appliances, electrical engineering, electrical equipment, explosion protection, ignition, ignition energy, inflammation, safety, safety engineering, testing

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 13821

November 2002

ICS 13,230

# **English version**

# Potentially explosive atmospheres - Explosion prevention and protection - Determination of minimum ignition energy of dust/air mixtures

Atmosphères explosibles - Prévention et protection contre l'explosion - Détermination de l'énergie minimale d'inflammation des mélanges poussière/air

Explosionsfähige Atmosphären - Explosionsschutz - Bestimmung der Mindestzündenergie von Staub/Luft-Gemischen

This European Standard was approved by CEN on 16 October 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.



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

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Conf	tents	
Forew	ord	oage 3
1	Scope	
2	Normative references	
3	Terms and definitions	
4 4.1 4.2	Test apparatusSpark generation circuit Test vessel	4
5	Test sample	5
6 6.1 6.2 6.3 6.3.1 6.3.2 6.4	Test procedure Test description Calibration Conformity Conformity tests Criteria for conformity Test report	5 6 7 7
A.1 A.2 A.3 A.4 A.5 A.6 A.7	A (normative) Descriptions of spark generating systems  General  Triggering by high-voltage relay, using a two-electrode system  Triggering by electrode movement, using a two-electrode system  Triggering by auxiliary spark, using 3-electrode system  Triggering by voltage increase, using two-electrode system  Triggering by transformer, using two-electrode system  Example of a test apparatus	9 10 11 12
Annex	ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.	15
Bibliog	graphy	16

# **Foreword**

This document EN 13821:2002 has been prepared by Technical Committee CEN /TC 305 "Potentially explosive atmospheres - Explosion prevention and protection", the secretariat of which is held by DIN.

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 2003, and conflicting national standards shall be withdrawn at the latest by May 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.

Annex A is normative.

This document includes a Bibliography.

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 test to determine the minimum ignition energy of a dust/air mixture by an electrically-generated spark.

The test method is not suitable for use with recognised explosives, gunpowder, dynamite, explosives which do not require oxygen for combustion; pyrophoric substances, or substances or mixtures of substances which can under some circumstances behave in a similar manner. Where any doubt exists about the existence of a hazard due to explosive properties, expert advice should be sought.

WARNING — It is essential that precautions are taken to safeguard the health of personnel conducting the tests against the risk of fire, explosion and/or toxic effects, of combustion products.

# 2 Normative references

There are no normative references.

# 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

## 3.1

### dust

small solid particles that are able to remain suspended in air for some time

NOTE Normally maximum particle sizes will not exceed 500  $\mu$ m. This definition includes what are defined in ISO 4225 as 'dust' and 'grit'