PLAHVATUSOHTLIKUD KESKKONNAD. TERMINID JA MÄÄRATLUSED PLAHVATUSOHTLIKES KESKKONDADES KASUTAMISEKS ETTE NÄHTUD SEADMETE JA KAITSESÜSTEEMIDE KOHTA

Potentially explosive atmospheres - Terms and definitions for equipment and protective systems intended for use in potentially explosive atmospheres



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Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 24.10.2012.	Date of Availability of the European standard is 24.10.2012.	
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ICS 01.040.13, 01.040.29, 13.230, 29.260.20

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# EUROPEAN STANDARD

# **EN 13237**

# NORME EUROPÉENNE EUROPÄISCHE NORM

October 2012

ICS 01.040.13; 01.040.29; 13.230; 29.260.20

Supersedes EN 13237:2003

#### **English Version**

# Potentially explosive atmospheres - Terms and definitions for equipment and protective systems intended for use in potentially explosive atmospheres

Atmosphères explosibles - Termes et définitions pour les appareils et systèmes de protection destinés à être utilisés en atmosphères explosibles

Explosionsgefährdete Bereiche - Begriffe für Geräte und Schutzsysteme zur Verwendung in explosionsgefährdeten Bereichen

This European Standard was approved by CEN on 1 September 2012.

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 CEN-CENELEC Management Centre or to any CEN member.

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

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# **Foreword**

This document (EN 13237:2012) 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of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.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 supersedes EN 13237:2003.

The significant changes between this European Standard and EN 13237:2003 are given in Annex B.

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 94/9/EC.

For relationship with EU Directive 94/9/EC, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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.

# Introduction

This European Standard has been produced to assist designers, manufacturers and other interested parties to itio.
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osphere. use harmonised terms and definitions (vocabulary) for equipment and protective systems intended for use in potentially explosive atmospheres. It describes the vocabulary to be used to give all standards in this area an overall uniformity of terminology. Throughout this European Standard, the only hazard considered is the explosion of an explosive atmosphere.

# 1 Scope

This European Standard specifies terms and definitions (vocabulary) to be used in suitable standards dealing with equipment and protective systems intended for use in potentially explosive atmospheres.

NOTE Directive 94/9/EC concerning equipment and protective systems intended for use in potentially explosive atmospheres can be applicable to the type of machine or equipment covered by this European Standard. The present standard is not intended to provide means of complying with the essential health and safety requirements of Directive 94/9/EC.

## 2 Normative references

Not applicable.

#### 3 Terms and definitions

#### 3 1

#### ambient atmosphere

normal atmosphere surrounding the equipment and protective system

#### 3.2

#### ambient temperature

temperature of the air or other medium where the equipment and protective system are to be used

## 3.3

#### combustible dust

dust able to undergo an exothermic reaction with air when ignited

Note 1 to entry: The terms "flammable" and "combustible" are used synonymously.

[SOURCE: EN 14034-1:2004+A1:2011, 3.3]

#### 3.4

#### conductive dust

dust with an electrical resistivity equal to or less than 10<sup>3</sup> Ωm

#### 3.5

# continuous grade of release

release which is continuous or is expected to occur frequently or for long periods

[SOURCE: EN 60079-10-1:2009, 3.11]

#### 3.6

#### deflagration

explosion propagating at subsonic velocity

[SOURCE: ISO 8421-1:1987]

#### 3.7

#### degree of protection

extent of protection provided by an enclosure against access to hazardous parts, against ingress of solid foreign objects and/or ingress of water and verified by standardised test methods

[SOURCE: EN 60529:1991 + A1:2000, 3.3]