

Irish Standard I.S. EN 16263-4:2015

Pyrotechnic articles - Other pyrotechnic articles - Part 4: Test methods

© CEN 2015 No copying without NSAI permission except as permitted by copyright law.

I.S. EN 16263-4:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

Published:

This document is based on:

EN 16263-4:2015 2015-08-12

This document was published ICS number:

under the authority of the NSAI

2015-08-29

and comes into effect on: 71.100.30

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales:

 1 Swift Square,
 F +353 1 807 3838
 T +353 1 857 6730

 Northwood, Santry
 E standards@nsai.ie
 F +353 1 857 6729

 Dublin 9
 W NSAI.ie
 W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

National Foreword

I.S. EN 16263-4:2015 is the adopted Irish version of the European Document EN 16263-4:2015, Pyrotechnic articles - Other pyrotechnic articles - Part 4: Test methods

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This is a free page sample. Access the full version online.

This page is intentionally left blank

EUROPEAN STANDARD

EN 16263-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2015

ICS 71.100.30

English Version

Pyrotechnic articles - Other pyrotechnic articles - Part 4: Test methods

Articles pyrotechniques - Autres articles pyrotechniques - Partie 4 : Méthodes d'essai

Pyrotechnische Gegenstände - Sonstige pyrotechnische Gegenstände - Teil 4: Prüfverfahren

This European Standard was approved by CEN on 12 May 2015.

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.

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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Conf	Contents Page				
Europ	ean foreword	4			
1	Scope	5			
2	Normative references	5			
3	Terms and definitions	5			
4	Apparatus				
4 4.1	General				
4.1	Test area				
4.2.1	General				
4.2.2	Indoor				
4.2.3	Outdoor				
4.3	Timing device				
4.4	Calliper				
4.5	Ruler				
4.6	Measuring tape				
4.7	Wind speed meter				
4.8	Balance				
4.9	Temperature chamber				
4.10	Sound level meter				
4.11	Shock apparatus				
4.12	Drop-test apparatus				
4.13	Goniometer				
4.14	Devices for measuring of effect height	7			
4.15	Devices for measuring thrust	7			
4.16	Abrasive sheet	8			
4.17	Witness screen	8			
4.18	Transparent type size sheet				
4.19	High speed video equipment				
4.20	Further test apparatus	9			
5	Test methods	10			
5.1	General				
5.2	Construction				
5.2.1	Outer dimension of item				
5.2.2	Determination of calibre				
5.2.3	Determination of gross mass				
5.3	Design verification				
5.3.1	General				
5.3.2	Conformity to drawings and part lists				
5.3.3	Pyrotechnic composition — Determination of net explosive content				
5.4	Angle of ascent and height of effects				
5.4.1	General				
5.4.2	Apparatus				
5.4.3	Procedure				
5.5	Measurement of sound pressure level	12			
5.5.1	Apparatus	12			
5.5.2	Procedure				
5.6	Timing measurement				
5.6.1	Apparatus				
5.6.2	Procedure				
5.7	Mechanical conditioning	12			

5.7.1	Apparatus	
5.7.2	Procedure	
5.8	Mechanical impact test (Drop test)	
5.8.1	Apparatus	
5.8.2	General	
5.8.3	Procedure	
5.9	Thermal conditioning	
5.9.1	Apparatus	
5.9.2	Procedure	
5.10	Function test	
5.10.1	General	
5.10.2	Apparatus	
5.10.3	Procedure	
5.11	Measurement of thrust	
5.11.1	Apparatus	
	Procedure	
5.12	Resistance to ignition by an abrasive surface	
5.12.1	Apparatus	
	Procedure	
5.13	Further tests	
5.13.1	Sensitiveness of pyrotechnic composition	
5.13.2	External temperature of hand-held pyrotechnic articles	
5.14	Measuring of labelling	
5.14.1	Apparatus	
5.14.2		
5.15	Measuring of the energy of fragments	
5.15.1	• • • • • • • • • • • • • • • • • • • •	
	Procedure	
5.16	Water immersion test	
	Apparatus	
5.16.2	Procedure	21
Annex	A (informative) Mechanical conditioning (Shock apparatus)	22
Annex	B (informative) Drop test (Mechanical impact test)	25
Annex	C (informative) Procedures for calculation of heights	26
	D (informative) Determination of the duration of accelerated ageing test to demonstrate	
Aillex	the correct functioning at the 'use by' date	30
	the correct functioning at the use by trace	30
Annex	E (informative) Overview of essential safety requirements and corresponding clauses of	-
	all parts of EN 16263	33
Annex	ZA (informative) Relationship between this European Standard and the Essential	
	Requirements of EU Directive 2007/23/EC on the placing on the market of pyrotechnic	
	articles	34
A nn a	7D (informative) Poletionship between this European Standard and the Economical	
Annex	ZB (informative) Relationship between this European Standard and the Essential	
	Requirements of EU Directive 2013/29/EU on the placing on the market of pyrotechnic	25
	articles	35
Bibliog	raphy	36

European foreword

This document (EN 16263-4:2015) has been prepared by Technical Committee CEN/TC 212 "Pyrotechnic articles", the secretariat of which is held by NEN.

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 2016, and conflicting national standards shall be withdrawn at the latest by February 2016.

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 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 or Annex ZB, which are an integral part of this document.

This European standard is one of the series of standards as listed below:

- EN 16263-1, Pyrotechnic articles Other pyrotechnic articles Part 1: Terminology;
- EN 16263-2, Pyrotechnic articles Other pyrotechnic articles Part 2: Requirements;
- EN 16263-3, Pyrotechnic articles Other pyrotechnic articles Part 3: Categories and types;
- EN 16263-4, Pyrotechnic articles Other pyrotechnic articles Part 4: Test methods;
- EN 16263-5, Pyrotechnic articles Other pyrotechnic articles Part 5: Minimum labelling requirements and instructions for use.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

1 Scope

This European Standard specifies test methods for other pyrotechnic articles (except pyrotechnic articles for vehicles, cartridges for powder actuated tools and ignition devices).

2 Normative references

The following documents, in whole or in part, are referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 16263-1:2015, Pyrotechnic articles — Other pyrotechnic articles — Part 1: Terminology

EN 16263-2:2015, Pyrotechnic articles — Other pyrotechnic articles — Part 2: Requirements

EN 16263-3:2015, Pyrotechnic articles — Other pyrotechnic articles — Part 3: Categories and types

EN 16263-5:2015, Pyrotechnic articles — Other pyrotechnic articles — Part 5: Minimum labelling requirements and instructions for use

EN 61672-1, Electroacoustics — Sound level meters — Part 1: Specifications (IEC 61672-1)

EN ISO 13385-1, Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 1: Callipers; Design and metrological characteristics (ISO 13385-1)

EN ISO 13385-2, Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 2: Calliper depth gauges; Design and metrological characteristics (ISO 13385-2)

ISO 6344-3, Coated abrasives — Grain size analysis — Part 3: Determination of grain size distribution of microgrits P240 to P2500

ISO 21948, Coated abrasives — Plain sheets

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16263-1:2015 apply.

NOTE Wherever reference is made to a pyrotechnic article only other pyrotechnic articles (not including those for vehicles, cartridges for powder actuated tools and ignition devices) are meant, as it is the scope of this standard.

4 Apparatus

4.1 General

Any equivalent apparatus with the same accuracy or better may be used.

4.2 Test area

4.2.1 General

The test area shall be unobstructed, non-flammable and suitable for the accurate measurement of the required parameters.

The test sample should be placed in the centre of the test area, as shown in the labelled instruction. The manufacturers supplied or recommended equipment shall be used.



This is a free preview	 Purchase the entire 	e publication at the link below:
------------------------	---	----------------------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation