

Irish Standard I.S. EN ISO 1043-4:1999&A1:2016

Plastics - Symbols and abbreviated terms -Part 4: Flame retardants (ISO 1043-4:1998)

 $\ensuremath{\mathbb C}$  CEN 2016  $\hfill No$  copying without NSAI permission except as permitted by copyright law.

#### I.S. EN ISO 1043-4:1999&A1:2016

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN ISO 1043-4:1999/A1:2016

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.* 

*This document is based on:* EN ISO 1043-4:1999 *Published:* 1999-05-19

<i>This document was published</i> under the authority of the NSAI			ICS number:
and comes into effect on:			83.040.30
			83.080.01
2016-05-15			
		NOTE: If bl	ank 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

#### National Foreword

I.S. EN ISO 1043-4:1999&A1:2016 is the adopted Irish version of the European Document EN ISO 1043-4:1999, Plastics - Symbols and abbreviated terms - Part 4: Flame retardants (ISO 1043-4:1998)

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 NORME EUROPÉENNE

# EN ISO 1043-4:1999/A1

# **EUROPÄISCHE NORM**

April 2016

ICS 83.080.01; 83.040.30

**English Version** 

# Plastics - Symbols and abbreviated terms - Part 4: Flame retardants (ISO 1043-4:1998/Amd 1:2016)

Plastiques - Symboles et abréviations - Partie 4: Ignifuges (ISO 1043-4:1998/Amd 1:2016) Kunststoffe - Kennbuchstaben und Kurzzeichen - Teil 4: Flammschutzmittel (ISO 1043-4:1998/Amd 1:2016)

This amendment A1 modifies the European Standard EN ISO 1043-4:1999; it was approved by CEN on 11 January 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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

© 2016 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 1043-4:1999/A1:2016 E

# This is a free page sample. Access the full version online. I.S. EN ISO 1043-4:1999&A1:2016

#### EN ISO 1043-4:1999/A1:2016 (E)

Contents	Page
European foreword	

#### **European foreword**

This document (EN ISO 1043-4:1999/A1:2016) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

This Amendment to the European Standard EN ISO 1043-4:1999 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 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.

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.

#### **Endorsement notice**

The text of ISO 1043-4:1998/Amd 1:2016 has been approved by CEN as EN ISO 1043-4:1999/A1:2016 without any modification.

This is a free page sample. Access the full version online. I.S. EN ISO 1043-4:1999&A1:2016

# INTERNATIONAL STANDARD

ISO 1043-4

First edition 1998-02-15

# Plastics — Symbols and abbreviated terms —

**Part 4:** Flame retardants

Plastiques — Symboles et abréviations — Partie 4: Ignifuges



Reference number ISO 1043-4:1998(E)

#### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 1043-4 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 1, *Terminology*.

ISO 1043 consists of the following parts, under the general title *Plastics* — *Symbols and abbreviated terms*:

- Part 1: Basic polymers and their special characteristics
- Part 2: Fillers and reinforcing materials
- Part 3: Plasticizers
- Part 4: Flame retardants

© ISO 1998

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization Case postale 56 • CH-1211 Genève 20 • Switzerland Internet central@iso.ch

X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

## Plastics — Symbols and abbreviated terms —

### **Part 4:** Flame retardants

#### 1 Scope

This part of ISO 1043 provides uniform symbols for flame retardants added to plastics materials. The symbols are written with the abbreviated term "FR" and one or more succeeding code numbers as given in clause 5. They are used in addition to the symbols for the plastics materials, for plastics material designation and for identification and marking of plastics products.

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 1043. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 1043 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1043-1:1997, Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics.

ISO 1043-2:1988, Plastics — Symbols — Part 2: Fillers and reinforcing materials.

ISO 1043-3:1996, Plastics — Symbols and abbreviated terms — Part 3: Plasticizers.

#### 3 Definition

For the purposes of this part of ISO 1043, the following definition applies:

**3.1** flame retardant: A substance that markedly retards the propagation of a flame.

NOTE — Included are flame retardants that are incorporated in prepolymers.

#### 4 Application of symbols

The symbols are written with the abbreviated term "FR", in capital letters, followed, without a space, by a two-digit code number enclosed in parentheses and selected, as appropriate, from the list given in clause 5. Only flame retardants exceeding 1 % (m/m) have to be identified. These symbols are used in addition to the symbols for a plastics material derived from parts 1, 2 and 3 of ISO 1043.



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

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation