

# **SLOVENSKI STANDARD** SIST EN 61340-4-4:2012/A1:2015

01-september-2015

Elektrostatika - 4-4. del: Standardne preskusne metode za posebne aplikacije -Elektrostatična razvrstitev prožnih vmesnih vsebnikov (FIBC) (IEC 61340-4-4:2012/A1:2014)

Electrostatics -- Part 4-4: Standard test methods for specific applications - Electrostatic classification of flexible intermediate bulk containers (FIBC) (IEC 61340-4-4:2012/A1:2014)

**iTeh STANDARD PREVIEW**Elektrostatik -- Teil 4-4: Normprüfverfahren für spezielle Anwendungen - Einordnung flexibler Schüttgutbehälter (FIBC) in elektrostatischer Hinsicht

Electrostatique -- Partie 4-4: Méthodes d'essai normalisées pour des applications spécifiques - Classification électrostatique des grands récipients pour vrac souples (GRVS)

Ta slovenski standard je istoveten z: EN 61340-4-4:2012/A1:2015

## ICS:

17.220.99	Drugi standardi v zvezi z elektriko in magnetizmom	Other standards related to electricity and magnetism
55.180.99	Drugi standardi v zvezi z distribucijo blaga s prevozom	Other standards related to freight distribution of goods

SIST EN 61340-4-4:2012/A1:2015 en,fr,de SIST EN 61340-4-4:2012/A1:2015

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 61340-4-4:2012/A1

January 2015

ICS 29.020; 17.220.99; 55.080

#### **English Version**

Electrostatics - Part 4-4: Standard test methods for specific applications - Electrostatic classification of flexible intermediate bulk containers (FIBC)

(IEC 61340-4-4:2012/A1:2014)

Electrostatique - Partie 4-4: Méthodes d'essai normalisées pour des applications spécifiques - Classification électrostatique des grands récipients pour vrac souples (GRVS)

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This amendment A1 modifies the European Standard EN 61340-4-4:2012; it was approved by CENELEC on 2014-12-17. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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

#### **Foreword**

The text of document 101/421/CDV, future IEC 61340-4-4:2012/A1, prepared by IEC/TC 101 "Electrostatics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61340-4-4:2012/A1:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2015-09-17 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2017-12-17 the document have to be withdrawn

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# iTeh STANDARD PREVIEW

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The text of the International Standard IEC 61340-4-4:2012/A1:2014 was approved by CENELEC as a European Standard without any modification.



IEC 61340-4-4

Edition 2.0 2014-11

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



AMENDMENT 1
AMENDEMENT 1

## Electrostatics - iTeh STANDARD PREVIEW

Part 4-4: Standard test methods for specific applications – Electrostatic classification of flexible intermediate bulk containers (FIBC)

SIST EN 61340-4-4:2012/A1:2015

Électrostatique | mtps://standards.iteh.ai/catalog/standards/sist/72866ba1-2a99-4601-af43-

Partie 4-4: Méthodes d'essai normalisées pour des applications spécifiques – Classification électrostatique des grands récipients pour vrac souples (GRVS)

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#### **FOREWORD**

This amendment has been prepared by IEC technical committee 101: Electrostatics.

The text of this amendment is based on the following documents:

CDV	Report on voting
101/421/CDV	101/447/RVC

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed.
- withdrawn,
- replaced by a revised edition, or ANDARD PREVIEW
- amended.

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IMPORTANT - The 'colour inside' logo on the cover page of this publication indicates that it contains hicolours which are seconsidered of to be useful, for the correct understanding of its contents, Users should therefore print this document using a colour printer.

#### 1 Scope

Replace the last sentence of NOTE 3 by the following new sentence:

IEC TS 60079-32-1 [1]<sup>1</sup> gives guidance on additional precautions that may be necessary.

#### 5 Safe use of FIBC

Replace the first paragraph by the following new text:

The requirements and specifications that FIBC shall meet and the ways in which they are used depend on the nature and sensitivity of any explosive atmosphere present during filling and emptying. The final goal for the construction of FIBC is to exclude incendiary discharges from the FIBC fabric during their intended use. FIBC constructed in compliance with the requirements specified in this standard do not necessarily ensure that hazardous electrostatic discharges, e.g. cone discharges or spark discharges from charged conductive products, will not be generated by the contents in FIBC. Information on the risks associated with cone discharges is given in Annex E.

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Replace the fifth paragraph by the following new text:

In accordance with general safety guidance (see IEC TS 60079-32-1), all conductive objects, including personnel, Type C FIBC and any conductive contents of FIBC, within a hazardous explosive atmosphere shall be properly earthed. Type D FIBC are not considered to be conductive objects and are not required to be earthed.

### 6 Labelling

Replace the text of item j) by the following new text:

j) for Type B, Type C and Type D the phrase "All conductive objects, including personnel shall be earthed during FIBC filling and emptying operations";

Replace Figures 1 to 3 by the following new figures:

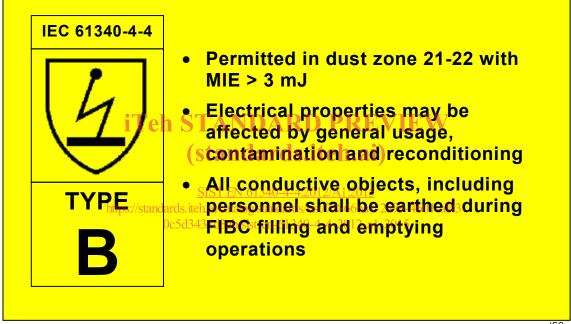
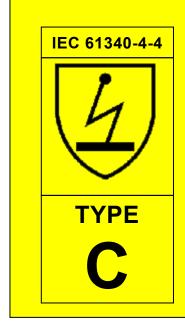


Figure 1 - Example of a label for Type B FIBC

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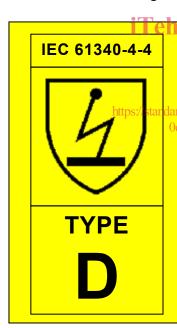


# FIBC shall be properly earthed according to manufacturer's instructions

- Permitted in dust zones 21-22 and in gas zones 1-2 (explosion groups IIA/IIB)
- Electrical properties may be affected by general usage, contamination and reconditioning
- All conductive objects, including personnel shall be earthed during FIBC filling and emptying operations

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Figure 2 - Example of a label for Type C FIBC



# FIBC does not require earthing

- <u>SPermitted in dust zones</u> 21- 22 and gas lards itch zones 1 2 (explosion groups IIA/IIB with 0c5d343MIE ≥ 0,14 mJ) and where charging currents ≤ 3 μA
  - Electrical properties may be affected by general usage, contamination and reconditioning
  - All conductive objects, including personnel shall be earthed during FIBC filling and emptying operations

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Figure 3 - Example of a label for Type D FIBC

### C.2.3 Charge transfer measurements

Replace the third and fourth paragraphs by the following new text:

IEC TS 60079-32-1 describes test apparatus and procedures that may be used to charge materials and make charge transfer measurements. The specified rubbing materials may not be appropriate for charging all types of FIBC, in which case they may be substituted for other, more suitable materials.

The maximum charge transfer limits shown in IEC TS 60079-32-1 are based on electrostatic discharges from homogeneous, non-conductive materials. The nature of electrostatic discharges from some static protective FIBC may differ in both spatial and temporal