

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



AMENDMENT 1

AMENDEMENT 1

Electrostatics –

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

Électrostatique –

Partie 4-4: Méthodes d'essai normalisées pour des applications spécifiques – Classification électrostatique des grands récipients pour vrac souple (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- withdrawn,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
- amended.

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### 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.

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:

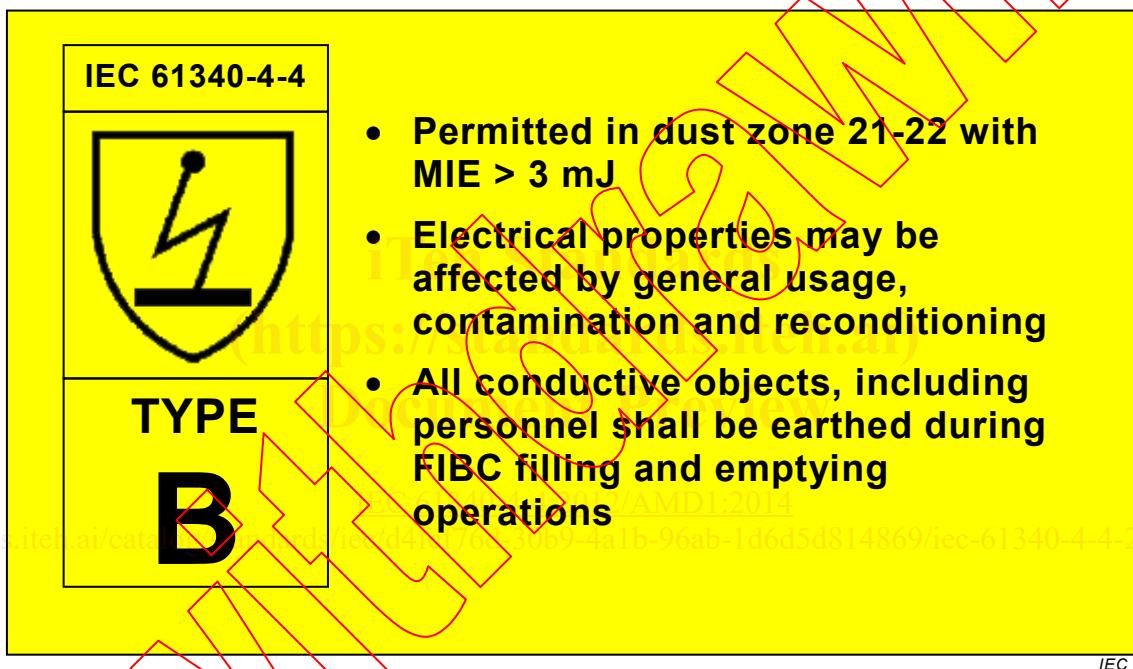


Figure 1 – Example of a label for Type B FIBC



Figure 2 – Example of a label for Type C FIBC

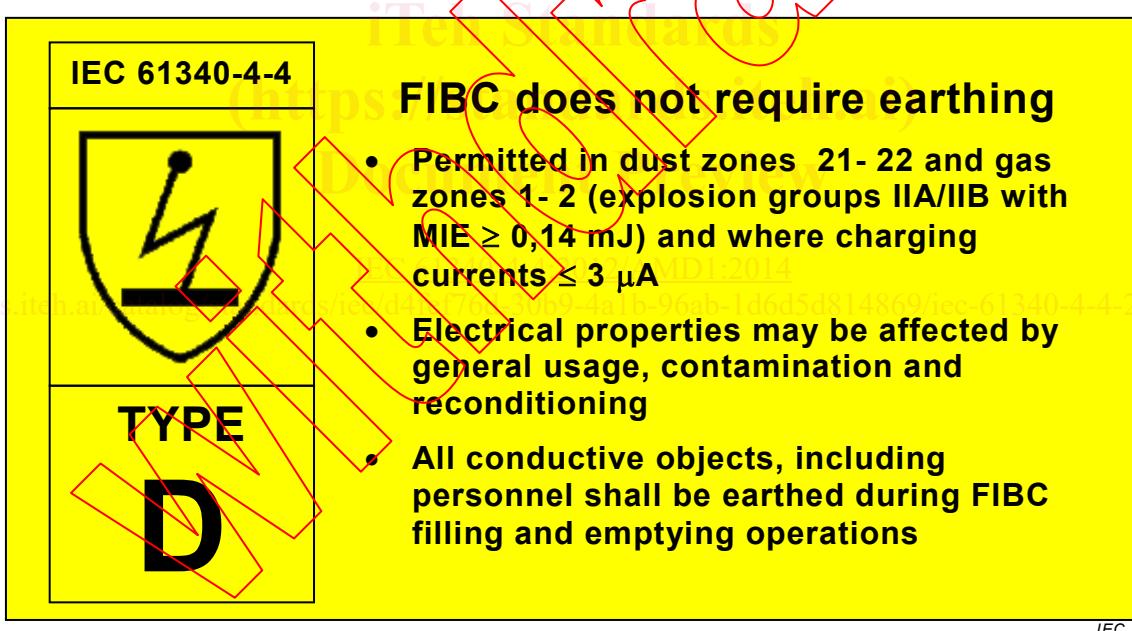


Figure 3 – Example of a label for Type D FIBC

### 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