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Packaging - Flexible intermediate bulk containers (FIBCs) for non-dangerous goods (ISO 21898:2024)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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ICS 55.180.99

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EUROPEAN STANDARD

EN ISO 21898

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2024

ICS 55.180.99

Supersedes EN ISO 21898:2005

English Version

## Packaging - Flexible intermediate bulk containers (FIBCs) for non-dangerous goods (ISO 21898:2024)

Emballages - Grands récipients vrac souples (GRVS)  
pour matières non dangereuses (ISO 21898:2024)

Verpackung - Flexible Großpackmittel (FIBC) für  
nichtgefährliche Güter (ISO 21898:2024)

This European Standard was approved by CEN on 12 August 2024.

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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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

This document (EN ISO 21898:2024) has been prepared by Technical Committee ISO/TC 122 "Packaging" in collaboration with Technical Committee CEN/TC 261 "Packaging" the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by March 2025, and conflicting national standards shall be withdrawn at the latest by March 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 21898:2005.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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## Endorsement notice

The text of ISO 21898:2024 has been approved by CEN as EN ISO 21898:2024 without any modification.

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## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 122, *Packaging*, Subcommittee SC 3, *Performance requirements and tests for means of packaging, packages and unit loads (as required by ISO/TC 122)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 261, *Packaging*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 21898:2004), which has been technically revised.

The main changes are as follows:

- in [5.2.1](#), a new note on non-standard filling material has been added;
- a new subclause [4.4](#) on the use of and requirement for recycled materials has been added;
- a new subclause [4.5](#) on electrostatic protective FIBC has been added;
- in [Clause 7](#), the label has been modified;
- [Annex A](#) has been revised;
- [Annex C](#) has been revised;
- a new [Annex F](#), Optional methods for UV resistance test, has been added;
- IEC 61340-4-4 has been incorporated in the document through a series of cross-references.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Packaging — Flexible intermediate bulk containers (FIBCs) for non-dangerous goods

## 1 Scope

This document specifies materials, construction and design requirements, type test and marking requirements for flexible intermediate bulk containers (FIBCs) intended to contain non-dangerous solid materials in powder, granular or paste form, and designed to be lifted from above by integral or detachable devices.

This document also provides guidance on the selection and safe usage of FIBCs.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4892-3, *Plastics — Methods of exposure to laboratory light sources — Part 3: Fluorescent UV lamps*

ISO 12048, *Packaging — Complete, filled transport packages — Compression and stacking tests using a compression tester*

ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method*

IEC 61340-4-4, *Electrostatics — Part 4-4: Standard test methods for specific applications — Electrostatic classification of flexible intermediate bulk containers (FIBC)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

### 3.1 General

#### 3.1.1

##### **flexible intermediate bulk container FIBC**

intermediate bulk container having the body made of flexible material such as woven plastic fabric or plastics film, designed to be in contact with the contents, either directly or through an inner liner, and collapsible when empty

#### 3.1.2

##### **heavy-duty reusable flexible intermediate bulk container**

FIBC designed and intended to be used for a multitude of fillings and discharges, and both factory and field repairable in such a way that the tensile strength across a repair is at least as great as that of the original