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## Intermediate bulk containers (IBCs) for non-dangerous goods — Terminology

*Grands récipients vrac (GRV) pour marchandises non dangereuses —  
Terminologie*

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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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ISO 15867 was prepared by the European Committee for Standardization (CEN) in collaboration with Technical Committee ISO/TC 122, *Packaging*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this document, read "...this European Standard..." to mean "...this International Standard...".

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## Foreword

This document (EN ISO 15867:2003) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 122 "Packaging".

This European shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2004, and conflicting national standards shall be withdrawn at the latest by January 2004.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

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## Introduction

Intermediate Bulk Containers (IBCs) comprise a family of large packagings which are intermediate between those described in (a) and the 'tanks' described in (b) below:

- a) Transport packagings such as drums and sacks (bags) are generally manufactured within an upper size limit irrespective of the form of the contents. Such upper size limits are generally not specified for non-dangerous contents though they are for dangerous goods. Drums for example are limited to a capacity of 450 l and to a mass of contents of 400 kg;
- b) Forms of 'tank' include road tank vehicles (e.g. for motor spirit) and rail tank wagons. They also include portable tanks which may, for instance, be similar to the containment vessel of a road tank vehicle but fitted with lifting devices. 'Tanks' are normally regarded as items of transport equipment rather than as packagings and their use may be described as transport in bulk. In some circumstances however, such as in the marine mode, the term 'bulk transport' may be restricted to tank ships.

To define an IBC it is necessary to take account of size, the capability for mechanical handling, the nature of the contents and the methodology for assessing performance.

The term intermediate bulk container (IBC) originated in the English language to denote a specific family of containers. It is often translated into other languages as a non specific term. In such instances reference can be made to this standard for a definition

## 1 Scope

This European Standard defines basic terminology for all forms of IBCs intended to transport non-dangerous goods.

## 2 Terms and definitions

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

### 2.1

#### **intermediate bulk container (IBC)**

primary packaging designed to:

- a) have a capacity of  $3 \text{ m}^3$  (3 000 l) or less;
- b) be handled mechanically with or without integral or detachable devices;
- c) contain liquids, pastes or solids (for instance powders or granules);
- d) be resistant to the stresses imparted during handling and transport as determined by tests.

NOTE 1 A lower size limit is not specified but an IBC of less than  $0,25 \text{ m}^3$  (250 l) is atypical and may require special consideration in relation to appropriate performance tests.

NOTE 2 IBCs may be designed for single-trip or multi-trip use. They may be designed to fold-down or be dismantled when empty. They may be fitted with an inner liner.

NOTE 3 Some packagings are identical with IBCs but are used to contain articles or other packages and do not therefore come under the definition of an IBC.

### 2.2

#### **metal intermediate bulk container**

IBC having the body made of a metal such as steel or aluminium, designed to be in contact with the contents (either directly or through an inner liner), and self-supporting when empty.

### 2.3

#### **flexible intermediate bulk container (FIBC)**

IBC having the body made of a flexible material such as woven fabric, plastics film or paper, designed to be in contact with the contents (either directly or through an inner liner), and collapsible when empty.

### 2.4

#### **rigid plastics intermediate bulk container**

IBC having the body made of plastics, designed to be in contact with the contents (either directly or through an inner liner), rigid in that it is self-supporting when empty or filled, and with the stresses of distribution (e.g. stack loading) taken entirely or mainly by that body.

### 2.5

#### **composite intermediate bulk container**

IBC comprising structural equipment in the form of a rigid outer casing designed to take the stresses of distribution and enclosing an inner plastics receptacle designed to be in contact with the contents (either directly or through an inner liner). The IBC is designed so that, once assembled, the outer casing and inner receptacle form, and are used, as an integrated single unit for filling, storage, transport and discharge. The inner body may be rigid, semi-rigid or flexible but is not designed to directly take the stresses of distribution.

### 2.6

#### **fibreboard intermediate bulk container**

IBC having the body made of fibreboard designed to be in contact with the contents (either directly or through an inner liner), and self-supporting when empty or filled.

**2.7**

**wooden intermediate bulk container**

IBC having the body made of sawn timber or wood panels such as plywood or reconstituted wood, designed to be in contact with the contents (either directly or through an inner liner), and self-supporting when empty or filled.

**2.8**

**inner liner**

liner for an IBC comprising a separate tube or bag inserted in the body but not forming part of it and designed to be in contact with the contents.

**2.9**

**inner coating**

coating for the inner surface of an IBC designed to be in contact directly with the contents

**EXAMPLE** The inner surface of a mild steel IBC is provided with an inner coating in the form of one or more layers of paint. This inner coating may be designed to protect the mild steel from interactions with the contents, or vice versa, or both.

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