# SLOVENSKI STANDARD
# SIST EN 12707:2010

**01-januar-2010**

**Nadomeġļ a:**
**SIST EN 12707:2001**

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**Plastiļ ni sodi - Sodi z nesnemljivim pokrovom (ozka odprtina) z nazivno prostornino 210 l in 225 l**

Plastics drums - Non-removable head (tight head) drums with a nominal capacity of 210 l and 225 l

Kunststofffässer - Spundfässer mit einem Nennvolumen von 210 l und 225 l



Fûts en matière plastique - Fûts à ouverture partielle d'une capacité nominale de 210 l et 225 l



**Ta slovenski standard je istoveten z:** **EN 12707:2009**

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**ICS:**

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|---|---|---|
| 55.140 | Sodi. Kovinski sodi. Roļ ke | Barrels. Drums. Canisters |

**SIST EN 12707:2010** **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 12707

July 2009

ICS 55.140

Supersedes EN 12707:1999

English Version

# Plastics drums - Non-removable head (tight head) drums with a nominal capacity of 210 l and 225 l

Fûts en matière plastique - Fûts à ouverture partielle d'une capacité nominale de 210 l et 225 l

Kunststofffässer - Spundfässer mit einem Nennvolumen von 210 l und 225 l

This European Standard was approved by CEN on 27 June 2009.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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## Foreword

This document (EN 12707:2009) has been prepared by 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of an identical text or by endorsement, at the latest by January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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.

This document supersedes EN 12707:1999.

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## 1 Scope

This European Standard specifies the characteristics and dimensions of non-removable head (tight head) plastics drums with a nominal capacity of 210 l and 225 l.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN ISO 20848-3, *Packaging -- Plastics drums -- Part 3: Plug/bung closure systems for plastics drums with a nominal capacity of 113,6 l to 220 l (ISO 20848-3:2006)*

## 3 Terms and definitions

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

**3.1**
**non-removable head (tight head) drum (TH)**
flat-ended or convex-ended circular cross-section packaging with openings for filling and emptying in the head not exceeding 70 mm in diameter



**3.2**
**nominal capacity (NC)**
capacity in litres which, by convention, is used to represent a class of drums of similar brimful capacities



**3.3**
**brimful capacity (BC)**
volume of water in litres held by the drum when filled through the filling orifice to the point of overflowing

NOTE Annex A specifies the method for measuring brimful capacity.

**3.4**
**total capacity (TC)**
volume of water in litres held by the drum when filled completely, i.e. following the removal of any air trapped in the drum

NOTE Annex A specifies the method for measuring total capacity.

**3.5**
**overall height ($h_o$)**
height of the finished drum from the base to the highest point

NOTE See Figure 1.

**3.6**
**overall diameter ($d_o$)**
maximum diameter of the drum, where relevant

NOTE See Figure 1.

**3.7**
**bung housing position ($p_b$)**
distance from the centre of the bung housing to the outside of the drum body 50 mm vertically below the top edge of the top handling ring

NOTE See Figure 1.

**3.8**
**drum mass**
mass of the empty drum including all closures

## 4 Requirements

### 4.1 Dimensions

The dimensions and tolerances of the drum shall be as listed in Table 1 and as shown in Figure 1. The measurements shall be conducted at ambient conditions but shall not be made within 48 h of manufacture.

NOTE Apart from the dimensions specified, there are no restrictions on drum shape.

### 4.2 Drum mass

The mass tolerance of the drum shall be within ± 4 %.

NOTE The defined mass should be agreed between the purchaser and the supplier.

### 4.3 Material identification symbol

The drum shall be permanently marked with the relevant material identification symbol, i.e. the symbol identifying the material from which the drum is made.



### 4.4 Closures



There shall be two closures, one of which shall be either a BCS 70 x 6 or a BCS 56 x 4 nominal plug size in accordance with EN ISO 20848-3. When fitted the closures shall not protrude above the overall height of the drum.

NOTE For the purpose of transport and storage, the filled drum should be closed, using the appropriate tooling, to the manufacturer's recommended closure torque for each type of gasket.

### 4.5 Materials

The drum shall be manufactured either from high density polyethylene or another suitable plastics materials appropriate to the physical and chemical requirements of its intended use.

### 4.6 Handling

Provision shall be made to enable the drum to be mechanically handled using one or two permanently fixed handling rings. The construction of the handling rings shall be adequate for normal static and dynamic handling of filled drums.

### 4.7 Stacking

The drum shall be capable of being stacked with or without pallets, according to the manufacturer's recommendations.

### 4.8 Draining

**4.8.1** The drum shall be designed so as to minimize the residual volume of liquid left in the drum after drainage. The residue shall be not more than 100 ml when tested according to **B.3** (procedure A).

**4.8.2** The residue obtained when the drum is tested according to **B.4** (procedure B) is more dependent on the area and condition of the internal surface of the drum than procedure A and therefore can be in excess of that for procedure A.

NOTE The maximum permitted figure should be agreed between the purchaser and the supplier.

### 4.9 Finish

The external surface finish shall be suitable for the attachment of labels.

NOTE 1 The nature of the internal and external finish should be agreed between the purchaser and the supplier.

NOTE 2 The preferred colour option for the drum body is blue. The use of any other colour should be agreed between the purchaser and the supplier.

## 5 Designation

A non-removable head (tight head) drum (TH) manufactured in accordance with this Standard shall be designated in the following manner:

Plastics drum TH EN 12707 NC – *Nominal capacity*

EXAMPLE 1 A non-removable head (tight head) drum (TH) manufactured in accordance with this standard with a nominal capacity of 210 l or 225 l would be designated:

Plastics drum TH EN 12707 NC – 210 l to 225 l.



EXAMPLE 2 A non-removable head (tight head) drum with a nominal capacity of 225 l would be designated:

Plastics drum TH EN 12707 NC - 225 l



NOTE Where the drums are intended to be used for the transport of dangerous goods, attention is drawn to the regulatory requirements which govern the transport of those goods in the countries concerned. In Europe, depending upon the mode of transport, this means meeting the requirements of:

— European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR);

— Regulations concerning the International Carriage of Dangerous Goods by Rail (RID);

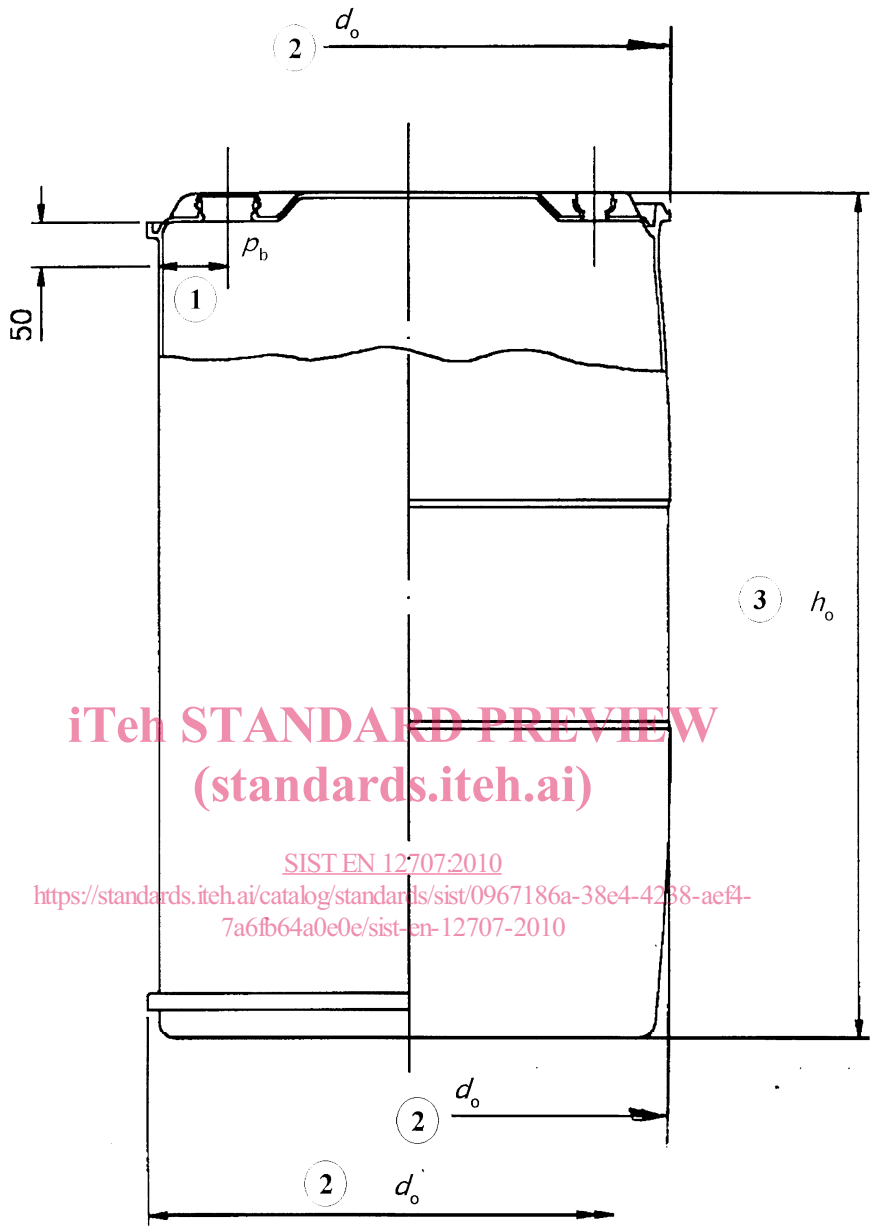
— Technical Instructions for the Safe Transport of Dangerous Goods by Air, Document 9284-AN/905 published by the Council of the International Civil Aviation Organization (ICAO);

— The International Maritime Dangerous Goods Code (IMDG-CODE) published by the International Maritime Organization (IMO).

**Table 1 — Dimensions of non-removable (tight head) drums with a nominal capacity of 210 l and 225 l**

| Nominal capacity (NC)<br>L | Brimful capacity (BC)<br>l | Overall diameter ($d_o$)<br>mm | Bung housing position ($p_b$)<br>mm | Overall height ($h_o$)<br>mm |
|---|---|---|---|---|
| 210 | 213 ± 3 | 580 ± 5 | — | 928 ± 5 |
| 225 | 228 ± 3 | 582 ± 3 | 72 ± 2 | 965 ± 5 |
| NOTE 1 The bung housing position defined in this table only applies to that housing used for filling.<br>NOTE 2 Dimensions $d_o$, $p_b$ and $h_o$ are applicable to empty drums. | | | | |

Dimensions in mm






**Key**

1 bung housing position
2 overall diameter
3 overall height

**Figure 1 — Non-removable head (tight head) drum with a nominal capacity of 210 l and 225 l**