# SLOVENSKI STANDARD
# SIST EN 12714:2001

**01-februar-2001**

---

**Plastiļ ni sodi s snemljivim pokrovom (ġiroka odprtina) z nazivno prostornino od 25 do 220 l**

Plastics drums - Removable head (open head) drums with a nominal capacity of 25 l to 220 l

Kunststofffässer - Deckelfässer mit einem Nennvolumen von 25 l bis 220 l



Futs en matieres plastiques - Futs a ouverture totale d'une capacité nominale de 25 l a 220 l



**Ta slovenski standard je istoveten z:** **EN 12714:2000**

---

**ICS:**

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

**SIST EN 12714:2001** **en**

# EUROPEAN STANDARD
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

**EN 12714**

January 2000

ICS 55.140

English version

# Plastics drums - Removable head (open head) drums with a nominal capacity of 25 l to 220 l

Fûts en matières plastiques - Fûts à ouverture totale d'une capacité nominale de 25 l à 220 l

Kunststofffässer - Deckelfässer mit einem Nennvolumen von 25 l bis 220 l

This European Standard was approved by CEN on 6 November 1999.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.



CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

**Central Secretariat: rue de Stassart, 36 B-1050 Brussels**



Ref. No. EN 12714:2000 E

Contents

## Foreword

This European Standard 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of an identical text or by endorsement, at the latest by July 2000, and conflicting national standards shall be withdrawn at the latest by July 2000.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This standard is one of a series of standards on plastics drums of 20 l to 225 l and closures.

Efficient packaging is of great importance for the distribution and the protection of goods. Insufficient or inappropriate packaging can lead to damage or wastage of the contents of the package.

# 1. Scope

This European Standard specifies the characteristics and dimensions of removable head (open head) plastics drums with a nominal capacity of 25 l to 220 l. This standard is not applicable to injection moulded pails.

# 2. Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN ISO 90-2:1999 Light gauge metal containers - Definitions and determination of dimensions and capacities — Part 2: General use containers (ISO 90-2:1997).

# 3. Terms and definitions

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

**3.1**
**removable head (open head) drum (OH)**
flat-ended or convex-ended circular cross-section packaging, the top end of which can be removed as a lid and is closed by means of a closing ring or other device



**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, with its lid on, 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, including the lid, from the base to the highest point (see Figure 1)

**3.6**
**overall diameter** ($d_o$)
maximum diameter of the drum, where relevant (see Figure 1)

**3.7**
**minimum opening** ($d_m$)
minimum drum body opening size (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 Tables 1 and 2 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

For drums with the nominal capacities specified, the mass tolerances shall be as indicated in Table 1.



*Table 1 - Drum mass tolerances*

| Nominal capacity<br>l | Mass tolerance<br>% |
|---|---|
| 25 | ±4 |
| 30 | ±4 |
| 50 | ±4 |
| 60 | ±4 |
| 120 | ±3 |
| 150 | ±3 |
| 220 | ±3 |



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

## 4.3 Material identification symbol

All the plastics components, excluding gaskets, shall be permanently marked with the relevant material identification symbol, i.e. the symbol identifying the material from which the component is made.

## 4.4 Closures

The closure system shall consist of a lid and a closing ring or other device.

NOTE For the purpose of transport and storage, the filled drum should be closed to the manufacturer's recommendations.

The closure system shall incorporate a facility for providing evidence of tampering.

### 4.5 Materials

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

### 4.6 Handling

Provision for manual handling shall be provided on drums of volume up to and including 60 l.

NOTE Adaptations for mechanical handling may be added but if so their construction should 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 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 removable head (open head) drum (OH) manufactured in accordance with this Standard with a nominal capacity of 25 l to 220 l shall be designated:

Plastics drum OH EN 12714 NC - 25 l to 220 l.

For example, a removable head (open head) drum with a nominal capacity of 120 l would be designated:

Plastics drum OH EN 12714 NC - 120 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 2 - Dimensions of removable (open head) drums with a nominal capacity of 25 l to 220 l*

| Nominal capacity (NC) l | Minimum total capacity (TC) l | Overall diameter ($d_o$) mm | Minimum opening ($d_m$) mm | Overall[a] height ($h_o$) mm |
|---|---|---|---|---|
| 25 | 26,5 | 305 ± 5 | 250 | 435 ± 6[a] |
| 30 | 31 | 316 ± 5 | 250 | 515 ± 6[a] |
| 50 | 52 | 380 ± 5 | 250 | 590 ± 10[a] |
| 60 | 62 | 397 ± 5 | 310 | 625 ± 10[a] |
| 120 | 125 | 495 ± 5 | 380 | 805 ± 10[a] |
| 150 | 155 | 495 ± 5 | 380 | 965 ± 10[a] |
| 220 | 224 | 595 ± 5 | 380 | 985 ± 10[a] |

[a] It is intended that these tolerances will be reduced to ± 5 mm at the five year review period.

NOTE Dimensions $d_o$, $d_m$ and $h_o$ are applicable to empty drums.