SLOVENSKI STANDARD
SIST EN 12707:2001

01-februar-2001

Plastiļ ni sodi - Sodi z nesnemljivim pokrovom (ozka odprtina) z nazivno prostornino 210 l, 220 l, 225 l

Plastics drums - Non-removable head (tight head) drums with a nominal capacity of 210 l, 220 l, 225 l

Kunststofffässer - Spundfässer mit einem Nennvolumen von 210 l, 220 l und 225 l

Futs en matiere plastique - Futs a ouverture partielle d'une capacité nominale de 210 l, 220 l et 225 l

Ta slovenski standard je istoveten z: **EN 12707:1999**

ICS:

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

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 12707

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English version

Plastics drums - Non-removable head (tight head) drums with a nominal capacity of 210 l, 220 l and 225 l

Fûts en matière plastique - Fûts à ouverture partielle d'une capacité nominale de 210 l, 220 l et 225 l

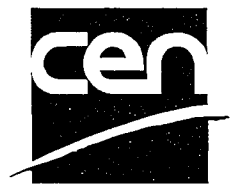
Kunststofffässer - Spundfässer mit einem Nennvolumen von 210 l, 220 l und 225 l

This European Standard was approved by CEN on 16 October 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.



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Contents

Page

FOREWORD 3

INTRODUCTION 3

1. SCOPE 4

2. NORMATIVE REFERENCES 4

3. TERMS AND DEFINITIONS 4

4. REQUIREMENTS 5

5. DESIGNATION 7

ANNEX A (NORMATIVE) : 10

CAPACITY MEASUREMENT METHOD FOR NON-REMOVABLE HEAD (TIGHT HEAD) PLASTICS DRUMS 10

ANNEX B (NORMATIVE) 12

DRAINING TEST METHOD FOR NON-REMOVABLE HEAD (TIGHT HEAD) PLASTICS DRUMS 12

TABLE 1 Dimensions of non-removable (tight head) drums with a nominal capacity of 210 l, 220 l and 225 l 8

FIGURE 1 : Non-removable head (tight head) drum with a nominal capacity of 210 l, 220 l and 225 l 9

Table A.1 — Correction factors 10

Figure B.1 : Determination of drainability 13

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 June 2000, and conflicting national standards shall be withdrawn at the latest by June 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.

The annexes A and B of this European Standard are normative.

Introduction

In accordance with the principles and aims of European standardization, the 220 l drum is recognized as being the preferred, target option.

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, 220 l and 225 l.

2. Normative references

This European Standard incorporates by dated and 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.

prEN 12708:1999	Plug/bung closure systems for plastics containers with a nominal capacity of 20 l to 225 l.
EN ISO 90-2:1999	Light gauge metal containers. Definitions and determination methods for 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
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 (see Figure 1)

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

3.7
bung housing position (p_o)
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 (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 ±3 %.

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 prEN 12708:1999. 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 may 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 with a nominal capacity of 210 l, 220 l or 225 l shall be designated:

Plastics drum TH EN 12707 NC - 210, 220, 225 l.

For example, a non-removable head (tight head) drum with a nominal capacity of 220 l shall be designated:

Plastics drum TH EN 12707 NC-220 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).