

## SLOVENSKI STANDARD oSIST prEN 840-2:2018

01-september-2018

Premični zabojniki za odpadke in za recikliranje - 2. del: Zabojniki na štirih kolesih s prostornino do 1300 l in ravnim(-i) pokrovom(-i) za iztresalnike z rokama in/ali glavnikom - Mere in oblika

Mobile waste and recycling containers - Part 2: Containers with 4 wheels with a capacity up to 1 300 I with flat lid(s), for trunnion and/or comb lifting devices - Dimensions and design

Fahrbare Abfall- und Wertstoffbehälter - Teil 2: Behälter mit 4 Rädern und einem Nennvolumen bis 1 300 I mit Flachdeckel(n), für Schüttungen mit Zapfenaufnahme und/oder für Kammschüttungen - Maße und Formgebung

Conteneurs roulants à déchets et de recyclage - Partie 2 : Conteneurs à 4 roues de capacité inférieure ou égale à 1 300 l à couvercle(s) plat(s), pour lève-conteneurs par tourillon et/ou à peigne - Dimensions et conception

Ta slovenski standard je istoveten z: prEN 840-2

ICS:

13.030.40 Naprave in oprema za

odstranjevanje in obdelavo

odpadkov

Installations and equipment for waste disposal and

treatment

oSIST prEN 840-2:2018

en,fr,de

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# DRAFT prEN 840-2

July 2018

ICS 13.030.40

Will supersede EN 840-2:2012

#### **English Version**

Mobile waste and recycling containers - Part 2: Containers with 4 wheels with a capacity up to 1 300 l with flat lid(s), for trunnion and/or comb lifting devices - Dimensions and design

Conteneurs roulants à déchets et de recyclage - Partie 2 : Conteneurs à 4 roues de capacité inférieure ou égale à 1 300 l à couvercle(s) plat(s), pour lève-conteneurs par tourillon et/ou à peigne - Dimensions et conception

Fahrbare Abfall- und Wertstoffbehälter - Teil 2: Behälter mit 4 Rädern und einem Nennvolumen bis 1 300 l mit Flachdeckel(n), für Schüttungen mit Zapfenaufnahme und/oder für Kammschüttungen -Maße und Formgebung

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 183.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

**Warning**: This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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## **European foreword**

This document (prEN 840-2:2018) has been prepared by Technical Committee CEN/TC 183 "Waste management", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 840-2:2012.

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### 1 Scope

This document specifies dimensions and design requirements of mobile waste containers with 4 wheels, with flat lid(s) and capacity up to 1 300 l to be used by trunnion and/or comb lifting device.

#### 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

prEN 840-5:2018, Mobile waste and recycling containers — Part 5: Performance requirements and test methods

prEN 840-6:2018, Mobile waste and recycling containers — Part 6: Safety and health requirements

prEN 1501-5:2018, Refuse collection vehicles — General requirements and safety requirements — Part 5: Lifting devices for refuse collection vehicles

EN ISO 11469, Plastics - Generic identification and marking of plastics products (ISO 11469)

#### 3 Terms and definitions

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

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

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

Note 1 to entry: Terms for components of mobile waste containers and lifting devices in three languages are given in Annex A of prEN 840-1:2018.

#### 3.1

#### mobile waste and recycling container

appropriately designed container fitted with wheels intended to temporarily store waste

#### 3.2

#### lifting device

structure which picks-up, tilts and empties containers

#### 3.3

### comb lifting device

lifting device in which the picking-up system consists of a row of teeth and a locking system to retain the container during emptying

#### 3.4

#### trunnion lifting device

lifting device in which the picking-up system consists of a pair of arms with automatic locking mechanism to fit the trunnion to retain the container during emptying

#### 3.5

#### volume

total space inside the container when the lid is closed

Note 1 to entry: See Table 1.

#### 3.6

#### nominal volume

capacity

volume stated by the manufacturer

Note 1 to entry: See Table 1 without tolerances.

Note 2 to entry: The English term "capacity" and the French term "capacité" are translated in the German version by the term "Nennvolumen".

#### 3.7

#### nominal mass

mass, which is calculated as given in Clause 6

#### 3.8

#### total permissible mass

mass of the container plus the nominal mass

#### 3.9

#### functional and safety dimensions

essential dimensions which ensure the functionality and interchangeability of the container with the compatible lifting device and which are necessary for the operator's safety and health

## 4 Volumes://standards.iteh.ai/catalog/standards/sist/3332274e-7f97-4e59-8b6f-

This part of EN 840 identifies the two classes of containers:

- Class I small size (nominal volume up to 1 000 l);
- Class II large size (nominal volume between 1 000 l and 1 300 l).

Within the two above-mentioned classes of containers the following volumes are identified:  $500 \, l$ ,  $660 \, l$ ,  $770 \, l$ ,  $1000 \, l$ ,  $1100 \, l$  and  $1200 \, l$ . Nominal volumes different from those referenced can be used by agreement between user and manufacturer. The tolerance of the volumes shall be  $\pm 5 \, \%$  maximum measured according to prEN 840-5:2018.

#### 5 Dimensions and design

- **5.1** The design of the containers need not correspond to the drawings given in Figure 1. The functional dimensions given in Table 1 shall be respected. Recommendations for manufacturers of lifting devices are given in Annex A (see also prEN 1501-1:2018).
- **5.2** The container shall be constructed so that when it is unloaded or loaded with a nominal load (see Clause 6), it fits on an approved compatible lifting device. It shall be automatically locked safely into the lifting device during the lifting operation. If the container is equipped with a comb receiver, it shall correspond to Figure 2 (Form A) or to Annex A, Figure A.1 (FormC).

- **5.3** The lid(s) shall cover the opening of the container completely. It shall be opened easily by itself during the emptying cycle it/they shall be made with at least two fixing points and have at least one means of opening.
- **5.4** Handles fitted in front of the trunnion shall have a measurement over the handles of 10 mm less than the actual measurement in Table 1, dimension  $N^{\circ}33$ . The handles and their location also shall be designed so that they do not damage the operator.
- **5.5** If the container has ribs in the frontal receiver they shall meet the requirements of Figures 2 and 4.
- **5.6** The container shall have four swivel castors. Each swivel castor shall be capable of withstanding 1/3 of the total permissible mass. Each castor shall meet the requirements of prEN 840-5:2018. The container shall have facilities for mounting the castor platine according to at least one of the measurements as shown in Figure 5.
- **5.7** All the surfaces of the container including design features shall be smooth and free of any foreign bodies or flaws.
- **5.8** The container should have a drain plug.
- **5.9** When direction locks are fitted they shall be fixed on at least two castors.
- **5.10** The container should be fitted with two braked wheels to requirements of prEN 840-5:2018. In case of centralized braking and locking system the brake pedal and the lock shall be fixed on a lateral side of the container. The centralized locking shall be able to be unlocked with a standard triangular key as shown in Figure 6. The effectiveness of the centralized braking system shall conform to prEN 840-5:2018.

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## 6 Nominal mass://standards.iteh.ai/catalog/standards/sist/3332274c-7f97-4c59-8b6f-4f40a67ab917/sist-en-840-2-2020

The container shall be constructed strongly enough to carry a mass of  $0.4 \, \text{kg/dm}^3 \, \text{x}$  nominal volume. Containers with a nominal volume of more than  $1\,100\,l$  shall be constructed strongly enough to carry a load of  $440\,kg$ .

## 7 Safety and health requirements

The container shall meet the safety and health requirements according to prEN 840-6:2018.

### 8 Testing

The container shall fulfil the performance requirements and the tests of prEN 840-5:2018.

#### 9 Marking

- **9.1** Each container complying with the requirements of this part of EN 840 shall be durably and readably marked on the body in a visible part with:
- number of this European Standard (prEN 840-2:2018);
- nominal volume;
- manufacturer's name or trademark;

- total permissible mass, in kilograms;
- year and month of manufacturing.
- **9.2** Additional marking for quality, recycling, etc. is allowed. Starting five years after the publication of this standard, plastic parts of containers, lids and wheels shall be marked in accordance with EN ISO 11469. The use of recycled materials is allowed, presuming that all requirements of this standard are complied with.

## 10 Designation

The container complying with the requirements of this European Standard shall be designated as follows:

	Containe r	EN 840-2	660	Α	0	264
Description						
Standard number						
Nominal volume, in litres						
Frontal receiver form:	STAI	NDARI	PRE	EVIE	V	
A = frontal receiver (Form A)						
0 = without frontal receiver https://standare					59-8b6f-	
C = frontal receiver (Form C)						
Lateral receiver:						
A = trunnions						
0 = without lateral receiver						
Nominal load, in kilograms						

Table 1 — Dimensions

## Dimensions in millimetres

Dimen-	Class I -	Class I - Small sizes < 1 000 l			- Large sizes	Remarks	
sion N°	5001	660 l	7701	1 000 l	1 100 l	1 200 l	
1 <sup>a</sup>	1 370 ± 10	1 370 ± 10	1 370 ± 10	1 370 ± 10	1 370 ± 10	1 370 ± 10	In case of trunnions
2	680 max.	780 max.	800 max.	1 115 max.	1 115 max.	1 115 max.	Total width lid(s) closed
3	740 max.	850 max.	870 max.	1 190 max.	1 190 max.	1 190 max.	When lid open
4	1 370 max	1 370 max.	1 370 max.	1 470 max.	1 470 max.	1 470 max.	
<sub>5</sub> a	860 min.; 1 290 max.	860 min.; 1 290 max.	860 min.; 1 290 max.	860 min.; 1 290 max.	860 min.; 1 290 max.	860 min.; 1 290 max.	Tipping edge
6	480 ± 50	585 ± 50	585 ± 50	870 ± 50	885 ± 50	885 ± 50	
7 <sup>a</sup>	135 min.; 280 max.	135 min.; 280 max.	135 min.; 280 max.	135 min.; 280 max.	135 min.; 280 max.	135 min.; 280 max.	In case of trunnions and min 850 from ground
8a	700 to 850	700 to 850	700 to 850	700 to 850	700 to 850	700 to 850	Handle position if present
9	600 to 850	600 to 850	600 to 850	600 to 850	600 to 850	600 to 850	Lock position if present
10 <sup>a</sup>	460 0 -45	$460^{+65}_{-45}$	460 <sup>+65</sup> <sub>-45</sub>	500+15	500 <sup>+15</sup> <sub>-40</sub>	500+15	In case of trunnions
11 <sup>a</sup>	Ø 200 ± 2 *)	Ø 200 ± 2 tps://*jandar	Ø 200 ± 2 *) 4f40a6	Ø 200 ± 2 *)	Ø 200 ± 2 *)	Ø 200 ± 2 *)	*) Ø min 160 optional according to 5.3 of prEN 840-6:2018
12 <sup>a</sup>	19 min.	19 min.	19 min.	19 min.	19 min.	19 min.	In case of frontal receiver
13 <sup>a</sup>	13 +5	13 +5	13 +5	13 +5	13 +5	13 +5	In case of frontal receiver
14 <sup>a</sup>	21-2	21-2	21-2	21-2	21-2	21+2	In case of frontal receiver
15	-	-	-	-	-	-	This dimension is used no longer.
16 <sup>a</sup>	26 ± 1	26 ± 1	26 ± 1	26 ± 1	26 ± 1	26 ± 1	In case of frontal receiver
17 <sup>a</sup>	58 max.	58 max.	58 max.	58 max.	58 max.	58 max.	In case of frontal receiver
18 <sup>a</sup>	20 min.	20 min.	20 min.	20 min.	20 min.	20 min.	In case of frontal receiver
19 <sup>a</sup>	130 max.	130 max.	130 max.	130 max.	130 max.	130 max.	When ribs are fitted
20	15 max.	15 max.	15 max.	15 max.	15 max.	15 max.	
21 <sup>a</sup>	33 <sup>+8</sup> <sub>-1</sub>	33+8	33+8	33+8	33+8	33+8	In case of frontal receiver