

## SLOVENSKI STANDARD oSIST prEN 840-6:2018

01-september-2018

# Premični zabojniki za odpadke in za recikliranje - 6. del: Varnostne in zdravstvene zahteve

Mobile waste and recycling containers - Part 6: Safety and health requirements

Fahrbare Abfall- und Wertstoffbehälter - Teil 6: Sicherheits- und Gesundheitsschutzanforderungen

## standards.iteh.ai)

Conteneurs roulants à déchets et de recyclage - Partie 6 : Exigences d'hygiène et de sécurité

https://standards.iteh.ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893f-

Ta slovenski standard je istoveten z: prEN 840-6

### <u>ICS:</u>

13.030.40 Naprave in oprema za odstranjevanje in obdelavo odpadkov Installations and equipment for waste disposal and treatment

oSIST prEN 840-6:2018

en,fr,de



# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 840-6:2020</u> https://standards.iteh.ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893fc208b998a451/sist-en-840-6-2020



# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# DRAFT prEN 840-6

ICS 13.030.40

July 2018

Will supersede EN 840-6:2012

**English Version** 

## Mobile waste and recycling containers - Part 6: Safety and health requirements

Conteneurs roulants à ordures ménagères et recyclables - Partie 6 : Exigences d¿hygiène et de sécurité Fahrbare Abfall- und Wertstoffbehälter - Teil 6: Sicherheits- und Gesundheitsschutzanforderungen

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

interest.//standards.iteh.ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893f-

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

#### oSIST prEN 840-6:2018

### prEN 840-6:2018 (E)

### Contents

European foreword		
1	Scope	4
2	Normative references	4
3	Terms and Definitions	
4	General requirements of construction	4
5	Handles	
6	Wheels	
7	Direction block	6
8	Brakes	6
9	Edges	
10	Lids	
11	Cleaning	7
12	Instructions for use <u>STANDARD PREVIEW</u>	
Biblio	Bibliography	

SIST EN 840-6:2020 https://standards.iteh.ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893fc208b998a451/sist-en-840-6-2020

### **European foreword**

This document (prEN 840-6:2018) 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 840-6:2012.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 840-6:2020 https://standards.iteh.ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893fc208b998a451/sist-en-840-6-2020

#### prEN 840-6:2018 (E)

#### 1 Scope

This document provides the essential safety, health and ergonomic requirements for mobile waste and recycling containers according to prEN 840-1:2018 to prEN 840-4:2018, not including hazardous wastes containers.

#### 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

#### **3** Terms and Definitions

No terms and definitions are listed in this document.

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

#### 4 General requirements of construction

**4.1** The container shall be constructed so that when it is unloaded or loaded with a nominal mass, it has a secure fit on an approved compatible lifting device and shall be automatically locked safely into the lifting device during the tilting and emptying operation.

**4.2** The container shall be safely fitted to the lifting device of the vehicle without being carried or lifted manually.

**4.3** Wheeled containers shall be constructed so that, under test conditions according to prEN 840-5:2018, the pushing and pulling forces to keep the container moving shall not exceed the values given in prEN 840-5:2018, 4.9. Pushing and pulling forces shall be declared in the instructions for use (see Clause 12).

**4.4** During construction of containers the following factors influencing measurable handling force shall be optimized:

- design of container as regards to form, size and position of centre of gravity in relation to positioning of wheels and handles;
- even distribution of loads on wheels;
- low rolling resistance.

#### **5** Handles

**5.1** Two wheeled containers shall have handles for pulling, pushing and manoeuvring the container that enable the operator to grip safely with two hands.

Four wheeled containers shall have handles for pushing, pulling, manoeuvring and lifting the container. Injuries caused by sharp edges shall be avoided.

**5.2** Handles for pulling, pushing and manoeuvring the container shall have one of the external forms as shown in Figure 1 (based on the external form of Figure 1 ring form section and U-shaped form section are permitted). A minimum length of 120 mm and a minimum clearance of 36 mm around the handle is required (see Figure 2).

**5.3** Handles for pulling, pushing and manoeuvring the container shall be positioned at a height of  $(900^{+400}_{-25})$  mm (measured in the middle of the handle) above the ground. On two wheeled containers,

for containers with a volume  $\geq$  140 l, these handles shall have a minimum height of 800 mm in a tilted position (centre of gravity above the wheel axle). For containers less than 140 l the handles shall have a minimum height of 700 mm. On four wheeled containers vertical handles are optional. If two handles are fitted they shall be a minimum of 450 mm apart and shall cover a height range from 780 mm to 1 050 mm. Two wheeled containers shall be filled with the test load for the test, their lids shall be closed.

Dimensions in millimetres

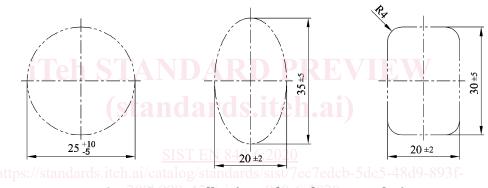
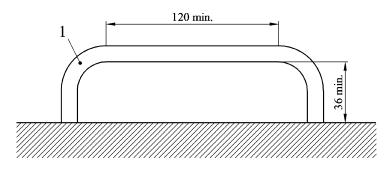


Figure 1 — Handles (round, oval, rectangular)

Dimensions in millimetres



#### Key

1 handle

Figure 2 — Clearance

#### 6 Wheels

**6.1** Containers with 4 wheels and a capacity not exceeding 1 700 l shall only have swivel castor wheels.

#### prEN 840-6:2018 (E)

Containers for towing with four wheels can have two fixed wheels or wheels which could be fixed.

6.2 The wheels and their position shall ensure a minimum of pushing/pulling force and good stability.

**6.3** The wheels on all containers shall have a nominal diameter of 200 mm. Wheels of nominal diameter of 160 mm on four-wheeled containers as well as larger wheels on two-wheeled containers are optional, as long as pushing forces are not exceeded (see 4.3).

**6.4** All wheels or castors shall be constructed to resist static and dynamic stress, e.g. by rolling against kerbstones (test according to prEN 840-5:2018).

**6.5** If castor-mounting brackets are used they shall not protrude beyond the widest part of the container body.

#### 7 Direction block

When direction blocks are fitted on containers with 4 wheels they shall be fitted to at least two wheels.

#### 8 Brakes

#### **8.1** General remark:

When brakes are fitted on containers with 4 wheels they shall be fitted to at least 2 wheels.

**8.2** The brakes shall be adjustable or self-compensating and capable of retaining the container on a minimum slope of ten degrees to the horizontal.

**8.3** Brakes shall be capable of being used easily by the operator.

**8.4** If containers are fitted with a central brake locking system it shall be possible to secure it against unauthorised unlocking.

**8.5** The brakes shall be tested according to prEN 840-5:2018, 4.9.4.

#### 9 Edges

**9.1** The container shall not have any sharp edges (a radius less than 1,4 mm).

**9.2** All edges which may be used for manoeuvring shall be rounded so that nobody can be injured.

#### 10 Lids

**10.1** To avoid the danger of crushed fingers when closing the lid, dome lids shall have a safety clearance to the front edge of at least 35 mm. The gap shall be closed by an elastic material.

Flat lids shall not damage fingers.

**10.2** Containers with dome lids shall be provided with a mechanism to hold the lid open automatically and prevent it from accidentally closing.

**10.3** Containers with assisted lids shall be provided with a device to ensure that the container lid cannot cause injury by its movement.

**10.4** The dome lid container shall be designed in such a manner that, in particular, a child's head cannot be trapped between lid and body of the container.

For dome lid container, a minimum gap of 181 mm shall be kept between lid and body of the container. This gap shall not be closed either automatically (by spring force or gravity) or unintentionally by a child's hand force.

The container shall be tested according to prEN 840-5:2018, 4.11.5.

### **11 Cleaning**

Containers shall be designed for easy cleaning.

#### **12 Instructions for use**

**12.1** Instructions for use shall be supplied so that the operator can have access to all available information on the correct use of containers.

Those instructions shall give information on all relevant factors to enable correct usage of a container. Also safety and health requirements shall be included.

**12.2** In order to give purchasers and all users of the container the necessary information to enable them to correctly choose and safely use the containers, the information provided shall as a minimum include:

- number of the European Standard (e.g. prEN 840-6:2018);
- volume;
- total permissible mass; (standards.iteh.ai)
- wheel diameter;

#### SIST EN 840-6:2020

- type of the wheel bearings; ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893f-
- whether direction blocks are fitted or not;
- whether brakes are equipped or not;
- adjusted braking torque;
- whether a central brake lock is equipped;
- pulling force, measured using the type test (see prEN 840-5:2018);
- essential dimensions including height of handles in the upright and tilted position.

The lid(s) shall be closed before the lifting device pick up the container.

This information shall conform to the delivered container.

prEN 840-6:2018 (E)

### Bibliography

- [1] EN 840-1, Mobile waste and recycling containers Part 1: Containers with 2 wheels with a capacity up to 400 l for comb lifting devices Dimensions and design
- [2] EN 840-2, 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
- [3] EN 840-3, Mobile waste and recycling containers Part 3: Containers with 4 wheels with a capacity up to 1 300 l with dome lid(s), for trunnion and/or comb lifting devices Dimensions and design
- [4] EN 840-4, Mobile waste and recycling containers Part 4: Containers with 4 wheels with a capacity up to 1 700 l with flat lid(s), for wide trunnion or BG- and/or wide comb lifting devices Dimensions and design

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 840-6:2020 https://standards.iteh.ai/catalog/standards/sist/7ec7edcb-5dc5-48d9-893fc208b998a451/sist-en-840-6-2020