



# SLOVENSKI STANDARD

## SIST EN 13071-1:2008

01-september-2008

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Stationary waste containers up to 5 000 l, top lifted and bottom emptied - Part 1: General requirements

**iTeh STANDARD PREVIEW**

Stationäre Abfallsammelbehälter bis 5 000 l, mit Behälteraufnahme an der Oberseite und Bodenentleerung - Teil 1: Allgemeine Anforderungen

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Conteneurs fixes de capacité 5 000 l, levés par le haut et vidés par le bas Partie 1: Spécifications générales

**Ta slovenski standard je istoveten z: EN 13071-1:2008**

### ICS:

13.030.40	Naprave in oprema za odstranjevanje in obdelavo odpadkov	Installations and equipment for waste disposal and treatment
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**SIST EN 13071-1:2008**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 13071-1**

June 2008

ICS 13.030.40

Supersedes EN 13071:2002

English Version

## Stationary waste containers up to 5 000 l, top lifted and bottom emptied - Part 1: General requirements

Conteneurs fixes de capacité 5 000 l, levés par le haut et vidés par le bas - Partie 1: Spécifications générales

Stationäre Abfallsammelbehälter bis 5 000 l, mit Behälteraufnahme an der Oberseite und Bodenentleerung - Teil 1: Allgemeine Anforderungen

This European Standard was approved by CEN on 18 April 2008.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

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

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COMITÉ EUROPÉEN DE NORMALISATION  
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**EN 13071-1:2008 (E)****Foreword**

This document (EN 13071-1:2008) has been prepared by Technical Committee CEN/TC 183 "Waste Management", the secretariat of which is held by DIN.

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 December 2008, and conflicting national standards shall be withdrawn at the latest by December 2008.

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, together with EN 13071-2:2008, supersedes EN 13071:2002.

Part 1 covers the requirements for stationary waste containers up to 5 000 l, top lifted and bottom emptied. Some technical changes respect to the previous edition, EN 13071:2002, address:

- a) the minimum capacity of 80 l which has been deleted;
- b) the definitions of, and general requirements for Type A and Type B containers;
- c) test conditions including a new test on the resistance of the roof;
- d) changes to data sheet, marking and test report;
- e) deletion of Annex A dealing with the noise test method for containers for waste glass collection for Type A and Type B, with volumes greater than or equal to 500 l.

Part 2 covers additional requirements for underground or partly underground containers.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies requirements of stationary containers, top lifted and bottom emptied, used for collection of solid non-hazardous wastes, with capacity up to 5 000 l.

This European Standard specifies the general characteristics of such containers and their accessories, the test methods and the safety requirements.

## 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 10327, *Continuously hot-dip coated strip and sheet of low carbon steels for cold forming - Technical delivery conditions*

EN 22248, *Packaging – Complete, filled transport packages – Vertical impact test by dropping (ISO 2248:1985)*

EN ISO 105–B02, *Textiles - Tests for colour fastness - Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, including amendment 1:1998)*

EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and tests methods (ISO 1461:1999)*

EN ISO 2244, *Packaging - Complete, filled transport packages and unit loads - Horizontal impact tests (ISO 2244:2000)*

EN ISO 4892-2, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps (ISO 4892-2:2006)*

ISO 48, *Rubber, vulcanized or thermoplastic – Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 2081, *Metallic coatings – Electroplated coatings of zinc on iron or steel*

## 3 Terms and definitions

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

### 3.1

#### **dead mass**

mass of the empty container including all attached components lifted together

NOTE Dead mass is expressed in kilograms.

### 3.2

#### **emptying device**

part of the structure of the container to allow it to be emptied

### 3.3

#### **emptying hatch**

opening parts, if present, at the bottom of the container that enables it to be emptied

### 3.4

#### **lifting connection**

structure fitted to the container to allow lifting and placing

**EN 13071-1:2008 (E)****3.5****locking system**

structure to maintain the emptying device closed

**3.6****nominal load**

load mass calculated from the container's nominal volume and the waste density

**3.7****nominal volume**

volume declared by the manufacturer

**3.8****test load**

specific load defined and used in each test

**3.9****total permissible mass**

nominal load plus the dead mass of the container including all attached components lifted together

**3.10****usable volume**

volume of the inside of the container beneath the bottom of the filling aperture

**3.11****filling aperture height**

vertical distance between ground level and the bottom of the filling aperture(s)

**3.12****total height**

vertical distance between the bottom of the container when opened and the top of the lifting connection

**3.13****container base dimensions**

horizontal dimensions of the bottom of the container including all attached components lifted together

**3.14****roof**

the top surface of the container or housing

**3.15****type A container**

container having maximum base dimensions of 2 200 mm x 3 000 mm

**3.16****type B container**

container having maximum base dimensions of 1 950 mm x 1 950 mm with the emptying device in normal open position

**4 General requirements****4.1 Design**

The container shall be capable of being immobilised by device or by design.

The container shall be constructed so that when it is loaded or unloaded with a nominal load, it fits on a designated lifting device. It shall be safely locked to the lifting accessory during the lifting operation.



The container shall not include any element that will result in collected materials being retained thereby compromising complete emptying.

Filling apertures shall be designed to prevent injuries to users in normal use. In addition, filling apertures shall be designed so that they prevent any person falling accidentally into the container. For round filling aperture having a diameter less than 200 mm or rectangular ones with one dimension less than 150 mm, no specific design is required.

Filling apertures for the deposit of glass shall be designed in such a way as to avoid fragments or any other debris coming out of the container.

The container shall be constructed such that it can be easily dismantled at its end of life. Materials shall be marked in accordance with ISO standards.

#### 4.2 Filling aperture height

Filling aperture height shall be 1 700 mm maximum. Where fitted, the filling aperture height for disabled persons shall be 1 200 mm maximum.

#### 4.3 Total height

Total height shall be 6 000 mm maximum.

#### 4.4 External surfaces/edges

Sharp edges shall be avoided in all cases. Rounded edges with a radius more than 1,4 mm are not considered as sharp edges.

#### 4.5 Lifting connection position

The lifting connection shall be positioned so that, when empty and with the emptying hatch closed, the container shall hang vertically.

#### 4.6 Total permissible mass

The total permissible mass shall not exceed 2 500 kg.

#### 4.7 Total usable volume

The total usable volume shall be obtained by calculation, and shall be within  $\pm 10\%$  of the nominal volume.

#### 4.8 Waste spillage

The container shall be designed so that at all times during the emptying operation, no waste shall spill.

### 5 Test conditions

#### 5.1 General

All tests shall be carried out on new containers.

#### 5.2 Temperature requirements

The tests shall be carried out at the following temperatures:

—  $T_1 = (23 \pm 5) \text{ }^\circ\text{C}$ ;

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—  $T_2 = (-18 \pm 0,2) \text{ } ^\circ\text{C}$ .

The minimum duration of conditioning before testing shall be 12 hours. If the test is carried out outside the conditioned room and the duration of the test is more than 5 min, then for each 5 minute period of testing the container shall be reconditioned for at least 15 min before continuing the test.

For special purposes a temperature lower than  $-18 \text{ } ^\circ\text{C}$  or higher than  $+23 \text{ } ^\circ\text{C}$  can be agreed with the customer; in this case it shall be indicated on the test report.

**5.3 Waste density**

For the calculation of test loads, the density value will be  $\rho = 0,4$  in  $\text{kg/dm}^3$ .

**6 Test methods****6.1 General**

Where a family of containers is produced from identical components, the testing of the components on the smaller containers can be omitted, providing the larger container's components have passed the tests.

**6.2 Test methods on empty containers****6.2.1 Stability test**

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**6.2.1.1 Requirement**

During the test according to 6.2.1.2, the container shall not tip over before an angle of  $10^\circ$  is obtained.

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**6.2.1.2 Procedure**

Apparatus:

- a sloping surface of sufficient dimension to accommodate the whole base of the container. So that the container does not slide before tipping over, the surface shall be covered with a rubber plaque of hardness  $60 \text{ IRHD}^{1)} \pm 5 \text{ IRHD}$  according to ISO 48 and density  $1,35 \pm 0,05 \text{ g/cm}^3$ , and a static friction coefficient  $\mu = 0,6 \pm 0,1$ ;
- a tilting device.

Temperature:  $T_1$ .

Method:

The container is placed on its base on the sloping surface facing the steepest direction (if in doubt, carry out the test in several positions); lift the side opposite the pivoting point in order to obtain the predetermined angle. This action should be realised at an angular speed less than  $1^\circ/\text{s}$ .

**6.2.2 Resistance to interior impacts****6.2.2.1 Requirement**

After the test, carried out according to 6.2.2.2, the functionality of the container shall not be compromised.

<sup>1)</sup> International Rubber Hardness Degree.

### 6.2.2.2 Procedure

Apparatus (see Figure 1):

- steel balls of mass  $2 \pm 0,1$  kg (diameter 80 mm max.);
- a tube for guiding the balls into the inside of the container. The inner diameter of the tube shall measure between 85 mm and 90 mm and allow a  $500 \text{ mm} \pm 5 \text{ mm}$  guidance length for the ball.

Temperature:

- generally:  $T_1$ ;
- for emptying hatch with thermoplastic parts:  $T_2$ .

Method (see Figures 1 and 2):

- place the end of the tube successively in each filling aperture only  $100 \text{ mm} \pm 5 \text{ mm}$  into the inside of the container. The tube rests by means of its own weight on the lowest point of the filling aperture;

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