



SLOVENSKI STANDARD
SIST EN 1466:2004+A1:2008
01-april-2008

Child care articles - Carry cots and stands - Safety requirements and test methods

Child care articles - Carry cots and stands - Safety requirements and test methods

Artikel für Säuglinge und Kleinkinder - Tragetaschen und Ständer -
Sicherheitstechnische Anforderungen und Prüfverfahren

Articles de puériculture - Couffins et supports - Exigences de sécurité et méthodes
d'essai

ITeH STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 1466:2004+A1:2007
<https://standards.iteh.ai/catalog/standards/sist/7c25715-d184-490c-8feb-cb7fad00a673/sist-en-1466-2004a1-2008>

ICS:

97.190

SIST EN 1466:2004+A1:2008

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 1466:2004+A1:2008

<https://standards.iteh.ai/catalog/standards/sist/7ed23713-d184-490c-8feb-cb7fad00a673/sist-en-1466-2004a1-2008>

English Version

Child care articles - Carry cots and stands - Safety requirements and test methods

Articles de puériculture - Couffins et supports - Exigences
de sécurité et méthodes d'essai

Artikel für Säuglinge und Kleinkinder - Tragetaschen und
Ständer - Sicherheitstechnische Anforderungen und
Prüfverfahren

This European Standard was approved by CEN on 1 October 2003 and includes Amendment 1 approved by CEN on 24 October 2007.

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.

[SIST EN 1466:2004+A1:2008](https://standards.iteh.ai/catalog/standards/sist/7ed23713-d184-490c-8feb-cb7fad00a673/sist-en-1466-2004a1-2008)

<https://standards.iteh.ai/catalog/standards/sist/7ed23713-d184-490c-8feb-cb7fad00a673/sist-en-1466-2004a1-2008>



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword.....	4
1 Scope (see C.3)	5
2 Normative references	5
3 Terms and definitions	5
4 Materials	5
4.1 General.....	5
4.2 Chemical properties (see C.4)	6
4.3 Flammability (see C.5)	6
4.4 Plastic internal lining.....	6
4.5 Plastic decals	6
5 Requirements	6
5.1 Carry cots and stands	6
5.1.1 Gaps and openings.....	6
5.1.2 Edges, points and corners (see C.6).....	7
5.1.3 Small parts.....	8
5.1.4 Cords, straps ribbons and other narrow fabrics	8
5.1.5 Moving parts.....	8
5.1.6 Filling materials.....	8
5.2 Carry cots	9
5.2.1 Internal height of carry cot and effectiveness of retaining function A_1 (see C.8) A_1	9
5.2.2 A_1 Total height of a carry cot with flexible handles A_1	9
5.2.3 Strength of carry cots	9
5.2.4 Stability of carry cots on the ground	9
5.2.5 Longitudinal stability of carry cots	9
5.2.6 Flexible handles of carry cots	10
5.3 Stands	10
5.3.1 Retention of the carry cot	10
5.3.2 Strength of stands	10
5.3.3 Stability of stands	10
5.3.4 Folding mechanism of stands	10
5.3.5 Castors/Wheels of stands	10
6 Test methods.....	10
6.1 Conditioning of products with removable fabric.....	10
6.2 Test equipment	10
6.2.1 Accuracy of test equipment.....	10
6.2.2 Test plate	11
6.2.3 Test cylinder A_1 (see C.9) A_1	11
6.2.4 Test probes.....	11
6.2.5 Cylinder.....	12
6.2.6 Test bar (1).....	13
6.2.7 Test bar (2).....	13
6.2.8 Datum board (see Figure 6)	13
6.2.9 Metal hooks	13
6.3 Tests for entrapment of fingers or limbs	15
6.4 Test for cords, straps and ribbons	16
6.5 Tests for carry cots.....	16
6.5.1 Test for rigidity of the sides of carry cots.....	16
6.5.2 Test for measurement of the internal height of rigid carry cots.....	17

6.5.3	Test for effectiveness of the retaining function of the sides	18
6.5.4	Test for measurement of the total height of the carry cot.....	18
6.5.5	Tests for strength of carry cots	18
6.5.6	Test for the stability of carry cots on the ground A_1 (see C.11) A_1	19
6.5.7	Test for the longitudinal stability of carry cots	20
6.5.8	Test for durability of flexible handles of carry cots	20
6.6	Tests for stands	21
6.6.1	Test for strength of stands	21
6.6.2	Test for stability of stands A_1 (see C.12) A_1	21
6.6.3	Test for fatigue resistance of locking and folding mechanisms of stands	21
6.7	Test for durability of marking A_1 (see C.13) A_1	22
7	Order of tests	22
8	Product information	22
8.1	General.....	22
8.2	Purchase information.....	22
8.3	Markings	22
8.4	Instructions on use and maintenance.....	23
Annex A	(normative) Order of tests	25
Annex B	(informative) A-deviations	26
Annex C	(informative) Background and rationale for this standard.....	27
C.1	Introduction.....	27
C.2	General.....	27
C.3	Scope	27
C.4	Chemical properties (see 4.2).....	28
C.5	Flammability (see 4.3)	28
C.6	Sharp edges, points and corners (see 5.1.2)	28
C.7	A_1 Rigid handle (see 5.2.2)	28
C.8	Internal height of carry cot and effectiveness of retaining function (see 5.2.1)	28
C.9	Test cylinder (see 6.2.3).....	28
C.10	Test for dynamic strength of carry cots (see 6.5.5.2).....	28
C.11	Test for the stability of carry cots on the ground (see 6.5.6)	28
C.12	Test for stability of stands (see 6.6.2)	28
C.13	Test for durability of marking (see 6.7)	28
Bibliography	29

Foreword

This document (EN 1466:2004+A1:2007) has been prepared by Technical Committee CEN/TC 252 “Child use and care articles”, 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 May 2008, and conflicting national standards shall be withdrawn at the latest by May 2008.

This document supersedes A1 EN 1466:2004 A1.

This document includes Amendment 1, approved by CEN on 2007-10-24.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 1466:2004+A1:2008
<https://standards.iteh.ai/catalog/standards/sist/7ed23713-d184-490c-8feb-cb7fad00a673/sist-en-1466-2004a1-2008>

1 Scope (see C.3)

This European Standard specifies safety requirements and test methods for products which are intended for the purpose of carrying a child in a lying position by means of handle(s) and for stands which may be used in conjunction with these products.

These products are intended for a child who cannot sit unaided, roll over or push up on its hands and knees, with a maximum weight of 9 kg. Hereafter, in this European Standard these articles are called "carry cots" and include all types of carry cots with rigid or soft sides as well as moses baskets and any similar articles. Any other functions of the product shall comply with relevant European standards.

The safety requirements specified in this European Standard are intended to assure that the carrying and sleeping functions do not present hazards to the child when the product is used in a normal way taking into account the foreseeable behaviour of the child.

This European Standard is not applicable to car seats and reclining cradles.

This European Standard has not considered the requirements of children with special needs.

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 71-1:2005+A4:2007 ^{A1}, *Safety of toys – Part 1: Mechanical and physical properties*

EN 71-2:2006+A1:2007 ^{A1}, *Safety of toys – Part 2: Flammability*

EN 71-3, *Safety of toys – Part 3: Migration of certain elements*

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

3 Terms and definitions

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

3.1

"carry cot" (generic term)

product consisting of a base, sides, ends and carrying handle(s), within which a child can be laid down and transported by hand(s)

3.2

stand

static structure designed to accommodate and support a carry cot

4 Materials

4.1 General

Wood, wood based material and material of vegetable origin shall be free from decay and insect attack when assessed by visual inspection.

4.2 Chemical properties (see C.4)

Surfaces of parts accessible to the child inside the carry cot shall be made using materials which in their soluble state have a metal content not exceeding the following values :

Antimony	:	60 mg/kg ;
Arsenic	:	25 mg/kg ;
Barium	:	1 000 mg/kg ;
Cadmium	:	75 mg/kg ;
Chromium	:	60 mg/kg ;
Lead	:	90 mg/kg ;
Mercury	:	60 mg/kg ;
Selenium	:	500 mg/kg.

The test procedure is defined in EN 71-3. If a surface is coated with a multi-layer of paint or similar coating, the sample shall be taken down to the substrate.

4.3 Flammability (see C.5)

Fabrics and plastics shall not produce any flash effect when tested in accordance with 5.4 of .

4.4 Plastic internal lining

To avoid choking or suffocation, any plastic internal lining shall have a minimum thickness of 0,2 mm.

4.5 Plastic decals

There shall be no plastic decals and similar items on the inside of the carry cot.

5 Requirements

5.1 Carry cots and stands

5.1.1 Gaps and openings

- When tested in accordance with 6.3 there shall be no gaps and openings inside the carry cot with a width greater than 5 mm and less than 12 mm, unless the depth of penetration is less than 10 mm.
- When tested in accordance with 6.3 there shall be no gaps and openings inside the carry cot and at the attachment point of the handles with a width greater than 25 mm and smaller than 45 mm, or greater than 65 mm.

5.1.2 Edges, points and corners (see C.6)

To avoid cuts and lacerations :

- a) small components such as hinges, brackets and catches shall be free of burrs and sharp edges. The minimum radii, shown in Figure 1, do not apply to small components such as hinges, brackets and catches ;
- b) edges, points and corners shall either comply with the examples given in Figure 1a), b) or c) or, if arising from a wall thickness smaller than 4 mm, they shall comply with at least one of the following requirements :
 - be chamfered or rounded ; or
 - be folded, rolled or spiralled (see examples in Figure 1d)) ; or
 - be protected with a plastic coating or other adequate means (see examples given in Figure 1e)) ;

Dimensions in millimetres

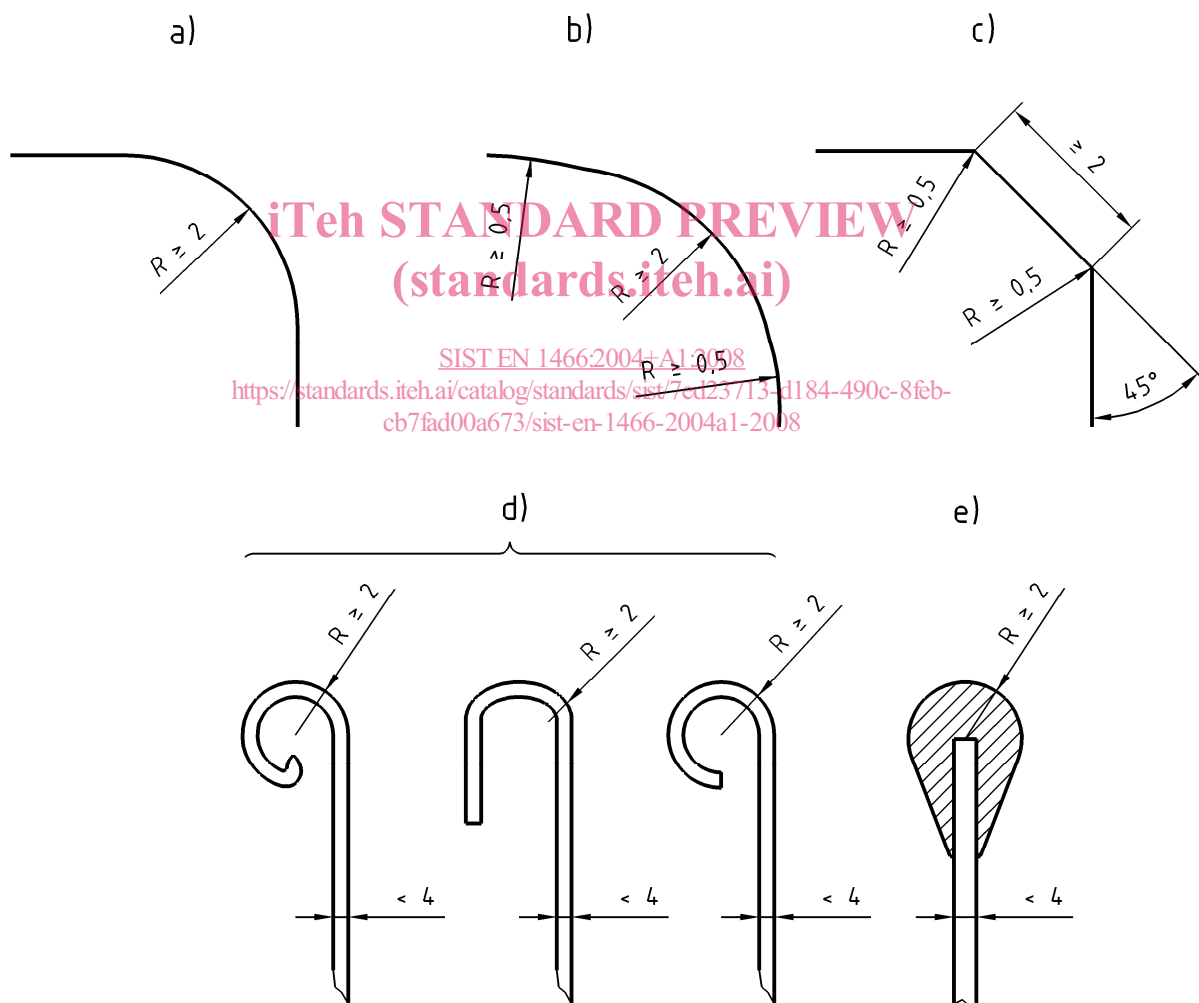


Figure 1 — Edges, points and corners

5.1.3 Small parts

In order to avoid ingestion or inhalation of small objects, detachable components shall not, without being compressed and whatever their orientation, fit entirely within the small parts cylinder shown in Figure 5.

Non-detachable components, i.e. those parts which are not intended to be removed, shall conform to one of the following :

- a) the components shall be so embedded that the child cannot grip them with its teeth or fingers ; or
- b) the components shall be so fixed to the product that they cannot become detached when the torque and tensile tests are carried out in accordance with paragraphs 4, 5, 6 and 7 of 8.4.2.1 of $\text{EN 71-1:2005+A4:2007}$, using the apparatus described in 8.4.1.1 and 8.4.1.2 of $\text{EN 71-1:2005+A4:2007}$; or
- c) any components which become detached when the torque and the tensile test are carried out in accordance with paragraphs 4, 5, 6 and 7 of 8.4.2.1 of $\text{EN 71-1:2005+A4:2007}$, using the apparatus described in 8.4.1.1 and 8.4.1.2 of $\text{EN 71-1:2005+A4:2007}$ shall not, without being compressed and whatever its orientation, fit entirely within the small parts cylinder having dimensions as given in Figure 5.

Parts which become detached during testing to other requirements shall not fit wholly within the small parts cylinder.

5.1.4 Cords, straps ribbons and other narrow fabrics

To avoid strangulation, the maximum free length of cords, straps, ribbons and other narrow fabrics shall be 220 mm when stretched by a force of 25 N when tested in accordance with 6.4. This requirement does not apply to the free ends of belts and harnesses if any are fitted.

The ends of any cords, straps, ribbons and other narrow materials shall be turned in or sealed or protected from fraying.

Any loop shall have a maximum perimeter of 360 mm.

5.1.5 Moving parts

To avoid shearing or crushing during the relative movement between moving parts, the following requirements shall be fulfilled :

- a) when the carry cot or stand has been deployed for use, there shall be no gap greater than 5 mm and smaller than 12 mm between parts which can move relative to each other ;
- b) during the setting up or folding away of the carry cot or stand :
 - if the movement is not under the action of a spring force or any other source of energy other than the person setting up or folding the carry cot or/and stand, then gaps between 5 mm and 12 mm are allowed between moving parts providing the edges and ends comply with 5.1.1 ;
 - if the movement is under the action of a spring force or any source of energy other than the person, setting up or folding away the carry cot and/or stand, there shall be no gap smaller than 18 mm between parts which move relative to each other.

5.1.6 Filling materials

To avoid choking filling materials shall be completely covered and retained. This shall be assessed by visual inspection.

Filling materials shall not contain any hard or sharp objects.

5.2 Carry cots

5.2.1 Internal height of carry cot and effectiveness of retaining function A1 (see C.8) A1

5.2.1.1 Rigidity of sides of carry cot

When the carry cot is tested in accordance with 6.5.1 if the difference between the two measurements is less than 40 mm, the sides of the carry cot are considered as rigid.

5.2.1.2 Internal height of rigid carry cot

The minimum internal height of the rigid carry cot measured in accordance with 6.5.2 shall be :

- a) for a carry cot having an internal length of 800 mm or less, measured 40 mm above the base of the test plate :
 - the minimum internal height shall be 150 mm for at least 170 mm in both directions from the centre line of the lengths ; and
 - at all other points on the sides and/or ends the minimum internal height shall be 100 mm ;
- b) for a carry cot having an internal length greater than 800 mm measured 40 mm above the base of the test plate :
 - the minimum internal height shall be 180 mm for at least 180 mm in both directions from the centre line of the lengths ; and
 - at all other points on the sides and/or ends the minimum internal height shall be 130 mm ;
- c) for a carry cot intended to be used on a stand, the minimum internal height above the base of the test plate shall be 200 mm.

5.2.1.3 Effectiveness of the retaining function of the sides of non rigid carry cots

When tested in accordance with 6.5.3, the test cylinder shall not roll out of the carry cot.

5.2.2 A1 Total height of a carry cot with flexible handles A1

The maximum total height of the carry cot measured when tested in accordance with 6.5.4 shall be 520 mm.

5.2.3 Strength of carry cots

A1 When tested in accordance with 6.5.5.1 and 6.5.5.2 no damage shall be observed in any part of the carry cot which shall continue to function as intended. A1

5.2.4 Stability of carry cots on the ground

Carry cots shall be designed so that they do not tip over when they are placed on slightly sloping ground or when the child leans against one side of the carry cot.

The carry cot shall not overturn and the test cylinder specified in 6.2.3 shall be retained within the carry cot when tested in accordance with 6.5.6.

5.2.5 Longitudinal stability of carry cots

When tested in accordance with 6.5.7, the maximum angle of inclination of the carry cot toward the head or the foot end shall be 10°.

5.2.6 Flexible handles of carry cots

A handle is regarded as flexible if it can be bent 90° perpendicularly to the side of the carry cot when applying a force of 2 N.

The attachment points or the top of the maintaining device shall be located in a position which is at least three quarters of the height of the carry cot, measured on the outside from the base.

Flexible handles shall show no signs of damage when tested in accordance with 6.5.8.

5.3 Stands

5.3.1 Retention of the carry cot

When tested in accordance with 6.6.2 with the stand placed both perpendicular and parallel to the slope, the carry cot shall be retained on the stand.

5.3.2 Strength of stands

When tested in accordance with 6.6.1, the stand shall not break or suffer any permanent distortion which will prevent its normal operation.

5.3.3 Stability of stands

When tested in accordance with 6.6.2, the product shall not tip over.

5.3.4 Folding mechanism of stands

- a) When tested in accordance with 6.6.3, the stand shall not collapse;
- b) any locking mechanism for the folding mechanism shall continue to operate satisfactorily after testing in accordance with 6.6.3.

5.3.5 Castors/Wheels of stands

The stand shall not be fitted with wheels or castors.

6 Test methods

6.1 Conditioning of products with removable fabric

Any carry cot or intended removable fabric shall be washed or cleaned and dried twice in accordance with the manufacturer's or supplier's instructions.

Resulting shrinkage of any fabric covering materials intended to be removed from the structure, shall not prevent the covering materials from being refitted to the structure without damaging the seams of the fabric and shall not impair its performance.

The carry cot shall be tested when assembled for normal use as supplied by the manufacturer or the retailer.

6.2 Test equipment

6.2.1 Accuracy of test equipment

Unless otherwise stated as specific requirements for a particular clause of this standard, all apparatus to apply forces shall have an accuracy of $\pm 5\%$, all masses an accuracy of $\pm 1\%$, all measurement systems an accuracy of $\pm 0,5$ mm and all angles a limit deviation of $\pm 1^\circ$.