



SLOVENSKI STANDARD
SIST EN 16120:2013+A1:2014
01-julij-2014

Izdelki za otroke - Otroški sedeži, ki se pritrdijo na stol

Child use and care articles - Chair mounted seat

Artikel für Säuglinge und Kleinkinder - Sitzerrhöhungen für Stühle

Articles de puériculture - Rehausseurs de chaise

Ta slovenski standard je istoveten z: EN 16120:2012+A1:2014

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ICS:

97.140	Pohištvo	Furniture
97.190	Otroška oprema	Equipment for children

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

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Child use and care articles - Chair mounted seat

Articles de puériculture - Rehausseurs de chaise

Artikel für Säuglinge und Kleinkinder - Sitzerrhöhungen für
Stühle

This European Standard was approved by CEN on 29 September 2012 and includes Amendment 1 approved by CEN on 25 February 2014.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 16120:2012+A1:2014 (E)**Foreword**

This document (EN 16120:2012+A1:2014) 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of an identical text or by endorsement, at the latest by October 2014, and conflicting national standards shall be withdrawn at the latest by October 2014.

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 includes Amendment 1 approved by CEN on 25 February 2014.

This document supersedes EN 16120:2012.

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1 Scope

This European Standard specifies safety requirements and test methods for chair mounted seats intended to be fixed on an adult chair to raise the sitting position of a child able to sit unaided up to an age of 3 years or a maximum weight of 15 kg.

The European Standard does not apply to products only aimed at restraining the child on a chair without raising the child's sitting position.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 71-3:1994, *Safety of toys — Part 3: Migration of certain elements*

EN 1103, *Textiles — Fabrics for apparel — Detailed procedure to determine the burning behaviour*

EN ISO 2439, *Flexible cellular polymeric materials — Determination of hardness (indentation technique) (ISO 2439)*

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3 Terms and definitions (standards.iteh.ai)

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

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3.1 chair attachment system <https://standards.iteh.ai/catalog/standards/sist/47e4fc11-a8b8-48ba-9af6-70f647048598/sist-en-16120-2013a1-2014>
system designed to attach the chair mounted seat to the adult chair

3.2 restraint system
system to restrain the child within the chair mounted seat

3.3 waist restraint
device to restrain the child in the waist area

3.4 crotch restraint
device to fit between the child's legs

4 Test equipment

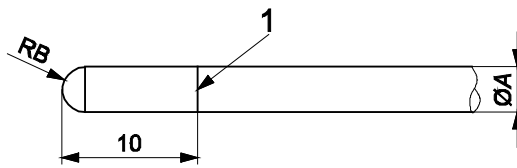
4.1 Test probes for finger entrapment

Probes made from plastics or other hard, smooth material of diameters $7_{-0,1}^0$ mm and $12_{0}^{+0,1}$ mm with a full hemispherical end that can be mounted on a force-measuring device, see Figure 1.

Mesh probe made from plastics or other hard, smooth material as shown in Figure 2.

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Dimensions in millimetres



Key

1 line scribed around circumference showing depth of penetration

Probe type	7 mm probe	12 mm probe
Diameter A	$7 \begin{smallmatrix} 0 \\ -0,1 \end{smallmatrix}$	$12 \begin{smallmatrix} +0,1 \\ 0 \end{smallmatrix}$
Radius RB	$3,5 \pm 0,2$	$6 \pm 0,2$

Figure 1 — Test probes with hemispherical end

Dimensions in millimetres

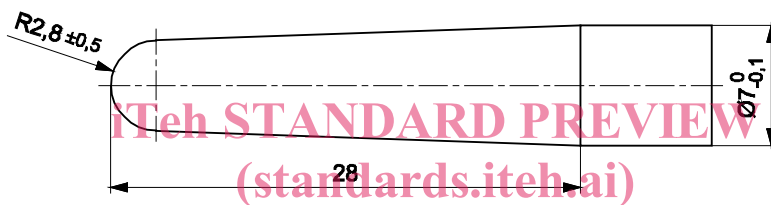


Figure 2 — Test probe for mesh

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4.2 Test mass A

A cylindrical bag with a diameter of 180 mm filled with sand to a total mass of 10 kg.

4.3 Test foam

Soft foam sheet (for example polyurethane) having a thickness of 25 mm with a bulk density of $(30 \pm 2) \text{ kg/m}^3$ and an indentation hardness index of 170 ± 20 according to EN ISO 2439.

4.4 Small parts cylinder

Small parts cylinder for the assessment of small components, having dimensions in accordance with Figure 3.

Dimension in millimetres

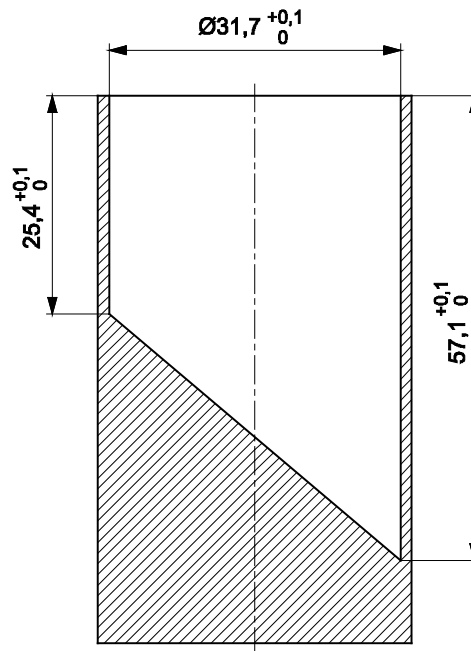


Figure 3 — Small parts cylinder

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4.5 Feeler gauge

Gauge with a thickness of $(0,4 \pm 0,02)$ mm and an insertion edge radius of $(3 \pm 0,5)$ mm (see Figure 4).

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Dimensions in millimetres

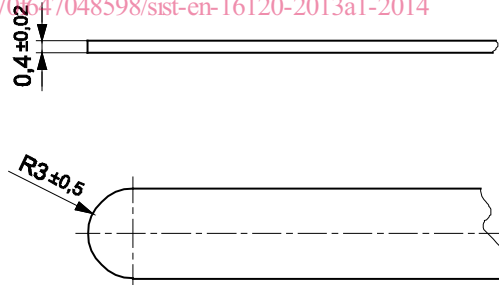


Figure 4 — Feeler gauge

5 General

5.1 Product conditioning

Before testing, any fabrics used shall be cleaned or washed and dried twice in accordance with the manufacturer's instructions.

5.2 Test conditions

The tests shall be carried out at a temperature of (20 ± 5) °C.

EN 16120:2012+A1:2014 (E)

The tests are designed to be applied to chair mounted seats that are fully assembled and ready for use in accordance with the manufacturer's instructions. If the chair mounted seat can be assembled or adjusted in different ways, the most onerous combination shall be used for each test.

5.3 Application of forces

The forces in the static load tests shall be applied sufficiently slowly to ensure that negligible dynamic force is applied.

5.4 Tolerances

Unless otherwise stated, the following tolerances apply:

— Forces:	$\pm 5 \%$ of the nominal force;
— Masses:	$\pm 0,5 \%$ of the nominal mass;
— Dimensions:	$\pm 1,0$ mm of the nominal dimension;
— Angles:	$\pm 2^\circ$ of the nominal angle;
— Positioning of loading pads:	± 5 mm;
— Duration of forces:	± 1 s.

The tests are described in terms of the application of forces. Masses can however be used: 1 kg mass may be used for 10 N force.

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Unless otherwise specified, the test forces may be applied by any suitable device which does not adversely affect the results.

5.5 Order of test

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Unless otherwise stated, the requirements of Clause 8 shall be assessed on the same chair mounted seat in the order listed in this standard.

6 Chemical hazards - Migration of certain elements (see A.2)

The migration of elements from coatings of paint, varnish, lacquer, polymer and similar coatings on exterior surfaces shall not exceed the following amounts:

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

These limits shall be verified in accordance with the test method given in EN 71-3:1994.

Where a surface is coated with a multi-layer of paint or similar coating, the test sample shall not include the base material.

A separate sample may be used for these tests.

7 Thermal hazards (see A.3)

When tested in accordance with EN 1103 there shall be no flash effect.

These requirements apply to parts with an area greater than 310 cm².

A separate sample may be used for these tests.

8 Mechanical hazards (see A.4)

8.1 Hazards due to height adjustment or folding of the product

8.1.1 General

Chair mounted seats in which the height of the sitting area can be adjusted shall have locking mechanism(s), complying with 8.1.2, to maintain the chair mounted seat in its position of normal use.

Chair mounted seats in which the base can be folded for storage shall have locking mechanism(s), complying with 8.1.2, to maintain the chair mounted seat in its position of normal use.

Chair attachment systems shall not be considered as locking mechanisms for height adjustment of the sitting area.

Inflatable systems shall be fitted with non-return valves.

8.1.2 Unintentional release of locking mechanism(s)

To avoid the hazards due to unintentional release of locking mechanisms, one of the following conditions shall be fulfilled before and after testing in accordance with 8.1.3:

- a) at least one locking mechanism requires an operating force greater than 50 N, or
- b) at least one locking mechanism is released by the use of a tool, or
- c) height adjustment requires at least two consecutive actions, the first of which shall be maintained while the second is carried out, or
- d) height adjustment requires at least two independent and simultaneous actions.

Inflatable systems are excluded from the requirements of this clause.

Products that in every position of use have to be removed from the adult chair to adjust the height or to fold the base for storage are excluded from the requirements of this clause.

8.1.3 Test method for the durability of the locking mechanisms

Operate 300 times any locking mechanism(s).