# SLOVENSKI PREDSTANDARD

oSIST prEN 12790:2005

december 2005

Izdelki za otroke in nego otrok - Sklopne zibelke

Child care articles - Reclined cradles

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN 12790:2009

https://standards.iteh.ai/catalog/standards/sist/58c6a277-1e1d-4262-816a-fdc19402667f/sist-en-12790-2009

ICS 97.190

Referenčna številka oSIST prEN 12790:2005(en)

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN 12790:2009

https://standards.iteh.ai/catalog/standards/sist/58c6a277-1e1d-4262-816a-fdc19402667f/sist-en-12790-2009

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# DRAFT prEN 12790

October 2005

**ICS** 

Will supersede EN 12790:2002

## **English Version**

# Child care articles - Reclined cradles

Articles de puériculture - Transats

Artikel für die Säuglinge und Kleinkinder - Kinderliegesitze

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 252.

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 Management Centre has the same status as the official versions.

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

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.

SIST EN 12790-2009

https://standards.iteh.ai/catalog/standards/sist/58c6a277-1e1d-4262-816a-fdc19402667f/sist-en-12790-2009



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

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

# **Contents**

Foreword		3
1	Scope	
2	Normative references	
3	Definitions	4
4	Properties of materials	6
5	Construction	
6	Test methods	11
7	Product information	24
8	Non-permeable packaging	25
Anne	x A (informative) A-deviations	26
Anne	x B (informative) Relevant standards and recommendations for multi purpose reclined cradles	27
Biblic	ography	28

(https://standards.iteh.ai)

SIST FN 12790-2009

https://standards.iteh.ai/catalog/standards/sist/58c6a277-1e1d-4262-816a-fdc19402667f/sist-en-12790-2009

# **Foreword**

This document (prEN 12790:2005) has been prepared by Technical Committee CEN/TC 252 "Child and use care articles", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12790:2002.

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN 12790:2009

https://standards.iteh.ai/catalog/standards/sist/58c6a277-1e1d-4262-816a-fdc19402667t/sist-en-12790-2009

# 1 Scope

This document specifies safety requirements and the corresponding test methods for fixed or folding reclined cradles intended for children up to a weight of 9 kg.

This standard does not cover the swinging function of reclined cradles.

Any relevant European standards or regulation are applicable for any other functions of this product (see Annex B).

## 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, Safety of toys - Part 1: Mechanical and physical properties.

EN 1103 Textiles – Burning behavior – Fabrics for apparel – Detailed procedure to determine the burning behavior of fabrics for apparel

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

EN ISO 868 Plastics and ebonite – Determination of indentation hardness by means of a durometer (shore hardness)(ISO 868: 2003)

ISO 48, Rubber, vulcanised or thermoplastic - Determination of hardness (Hardness between 10 IRHD and 100 IRHD)

ISO 7619-1 Rubber, vulcanized or thermoplastic – Determination of indentation hardness – Part 1: Durometer method (Shore)

ISO 7619-2 Rubber, vulcanized or thermoplastic – Determination of indentation hardness – Part 2: IRHD pocket meter method

## 3 Definitions

For the purposes of this standard, the following definitions apply.

#### 3.1

## reclined cradle

article intended for accommodate a child in a reclined position. It can be either a static, rocker or bouncer type or any combination of these. These may have adjustable back

#### 3.1.1

#### static

article that does not bounce or rock

# 3.1.2

## rocker

article that is intended to allow the child to rock due to the construction of the base

## 3.1.3

#### bouncer

article that is intended to allow the child to bounce due to the flexibility of the frame or any other mechanical action

#### 3.2

# restraint system

system to restrain the child within the article

#### 3.3

#### crotch restraint

device designed to pass between the child's legs to prevent the child from sliding forward

#### 3.4

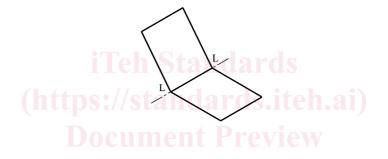
# carrying handle

component parts allowing the reclined cradle to be carried by hand

#### 3.5

# junction line

a) the intersection of the seat and the back, (see Figure 1a))



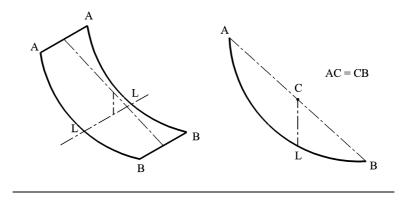
# Key

L) Junction line

IST EN 12790-2009

https://standards.iteh.ai/catalog/ Figure 1a - Determination of the junction line 9402667f/sist-en-12790-2009

b) when the seat is in the form of hammock, then a theoretical junction line, "L", is determined as shown in Figure 1b).



# Key

L) Junction line

Figure 1b - Determination of the junction line for reclined cradles in form of hammock

# prEN 12790:2005 (E)

#### 3.6

## locking device

device mounted on an article, which will maintain parts of the article in position of use

#### 3.7

#### locking mechanism

mechanism composed by locking device(s) and any feature provided to operate the device

# 4 Properties of materials

# 4.1 Chemical properties

The migration of synthetic or natural elements: coating of paint, varnish, lacquer, printing ink, polymer and similar coatings, the other materials whether mass coloured or not shall comply with the following amounts.

Antimony: 60 mg/kg

Arsenic : 25 mg/kg

Barium : 1000 mg/kg

Cadmium : 75 mg/kg

Chromium: 60 mg/kg

Lead : 90 mg/kg

Mercury : 60 mg/kg 3 2 1 0 2 1 0 5 1 0 1 2 1

Selenium: 500 mg/kg Preview

These limits shall be checked according to the test prescribed in EN 71-3.

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

Any accessible surface, plastics, coatings or finishes shall comply with EN 71-3.

#### 4.2 Flammability

There shall be no parts of the reclined cradle which can give rise to surface flash effect, when tested in accordance with EN 1103.

## 5 Construction

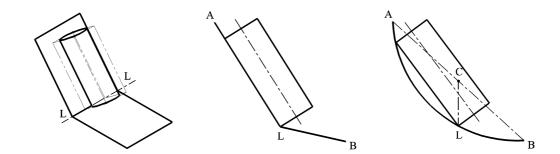
#### 5.1 General

If not otherwise stated, all forces shall have an accuracy of  $\pm$  5 %, all masses an accuracy of  $\pm$  0,5 % ,all dimensions an accuracy of  $\pm$  0,5 mm and all angles  $\pm$  0.5°.

Where the test mass A or test mass B are used, they shall be positioned in the reclined cradle as shown in Figure 2 and retained by the restraint system.

# 5.2 Shrinkage

The following requirements shall be fulfilled after washing or cleaning and drying the fabrics twice in accordance with the manufacturers instructions. Any resulting shrinkage in the fabric covering materials shall not prevent them from being refitted, if removable, and shall not show any damage to the seams or fabrics that may impair the reclined cradles performance during testing.



#### Key

L) Junction line

Figure 2 — Positioning of the test mass

# 5.3 Openings

When tested in accordance with 6.2 there shall be no holes, openings or gaps with a width greater than 7mm and less than 12mm unless the depth of penetration is less than 10mm on the inner and upper surface for the child.

The test shall be carried out with the product in any intended position of use.

Restraint systems are excluded from this requirement.

# 5.4 Edges, points and corners

All accessible edges, corners and protruding parts on the inner and upper surface for the child shall be designed so as to reduce the risk of inflicting wounds.

Accessible edges and corners shall either comply with the examples given in Figures 3a) or 3b), or if arising from a wall thickness smaller than 4 mm, with one of the following requirements:

- be chamfered or rounded;
- be folded, rolled or spiralled as shown in Figure 3c);
- be protected with a plastic coating or other adequate means as shown in Figure 3d).

All surfaces shall be smooth and free from burrs.

Dimensions in millimetres

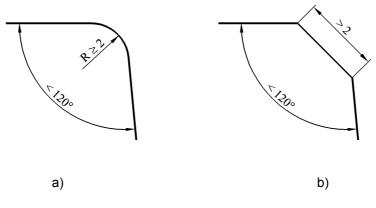


Fig. 3a-3b

Dimensions in millimetres

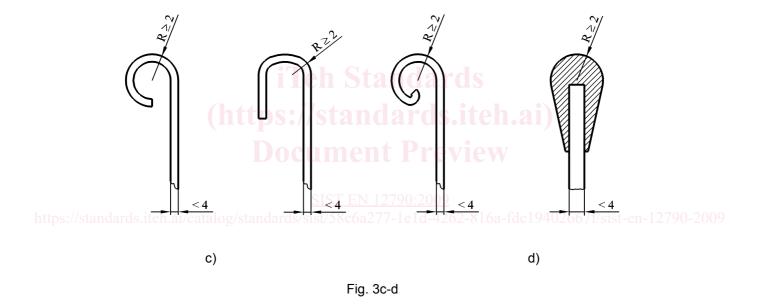


Figure 3 — Examples for minimum radii of edges and corners

The minimum radii shown in Figure 3 do no apply to small components such as hinges, brackets and catches.

# 5.5 Small parts

When tested in accordance with clause 6.3 any part that can be detached shall not fit wholly within the cylinder.

# 5.6 Cords, strings and other narrow fabrics

Cords, strings and other narrow fabrics excluding restraint system shall have a maximum free length of 220 mm or less when stretched by a force of 25 N.

# 5.7 Moving parts

With the article assembled and/or adjusted for normal use there shall be no moving parts which can close to less than 12 mm, as the result of:

- a) the movement of the article;
- b) the movement of the body weight or action of the child using the article;

The base of the article and its functional parts for rocking and bouncing are excluded from this requirement.

# 5.8 Springs

If the reclined cradle is fitted with springs, a protection is required when the space between two helical coils can become equal to or greater than 3 mm and smaller than 12 mm, when tested in accordance with 6.4.

# 5.9 Locking mechanisms for folding system

Reclined cradles which may be folded for storage or transportation purposes shall be fitted with locking mechanisms for folding system.

Locking mechanisms are required to prevent a reclined cradle folding whilst the child is in the cradle and also during the process of a child being put in and taken out of the cradle.

#### 5.9.1 Incomplete deployment

To avoid the hazard due to incomplete deployment, one of the following conditions shall be fulfilled:

- a) the weight of the child using the product acts to engage at least one locking mechanism, or
- b) at least one locking mechanism engages automatically when the product is deployed for use according to manufacturer instructions for use.

When non automatic locking mechanisms for folding system are not fully engaged, the article shall not collapse or tip over when tested in accordance with 6.5.1.

# 5.9.2 Unintentional release of locking mechanisms

To avoid the hazards due to unintentional release or operation by a child, one of the following conditions shall be fulfilled:

- a) at least one locking mechanism requires a force greater than 50N before and after test in accordance with 6.5.3, or
- b) at least one locking mechanism requires the use of a tool to be released, or
- c) folding is only possible when two independent locking mechanisms are operated simultaneously, or
- d) there are two or more automatically engaging locking devices that cannot be released by one single action, or
- e) folding requires two consecutive actions, the first of which must be maintained while the second is carried out.

During the test in accordance with 6.5.2, the reclined cradle shall not collapse.

#### 5.10 Reclining system

Reclined cradles with adjustable backrest or seat angle shall be equipped with a stop to restrain the adjustment to the maximum reclined position.

Any adjustment device shall not be positioned on the inner and upper surface for the child.

The stop shall avoid any inadvertent contact between the seat unit and the ground or any rigid part of the frame during the test 6.6.