

| | | |
|------------|--|----------------------------|
| STN | Výrobky pre deti a na starostlivosť o deti Hojdačky pre malé deti | STN EN 16232+A2 |
| | | 94 3010 |

Child use and care articles - Infant swings

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/23

Obsahuje: EN 16232:2013+A2:2023

Oznámením tejto normy sa od 30.09.2024 ruší
STN EN 16232+A1 (94 3010) z januára 2019

137694

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 16232:2013+A2

September 2023

ICS 97.190

Supersedes EN 16232:2013+A1:2018

English Version

Child use and care articles - Infant swings

Articles de puériculture - Balancelles suspendues pour enfant

Artikel für Säuglinge und Kleinkinder - Babyschaukeln

This European Standard was approved by CEN on 16 April 2018 and includes Amendment 2 approved by CEN on 25 December 2022.

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-CENELEC 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-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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



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

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

EN 16232:2013+A2:2023 (E)**Contents**

Page

| | |
|---|-----------|
| European foreword | 4 |
| 1 Scope..... | 5 |
| 2 Normative references..... | 5 |
| 3 Terms and definitions | 5 |
| 4 Test equipment..... | 6 |
| 4.1 Articulated test mass | 6 |
| 4.2 Test mass A..... | 7 |
| 4.3 Test mass B..... | 8 |
| 4.4 Small parts cylinder | 8 |
| 4.5 Feeler gauge | 8 |
| 4.6 \triangleleft Test probes for finger entrapment | 9 |
| 4.7 Test surface for static slippage | 11 |
| 4.8 Test surface for stability..... | 11 |
| 4.9 Test equipment for sound level measurement | 11 |
| 5 General requirements and test conditions..... | 11 |
| 5.1 Product conditioning..... | 11 |
| 5.2 Test conditions | 11 |
| 5.3 Application of forces | 12 |
| 5.4 Tolerances | 12 |
| 5.5 Order of tests | 12 |
| 6 \triangleleft Chemical hazards | 12 |
| 7 \triangleleft Thermal hazards (see A.3) | 14 |
| 8 Mechanical hazards..... | 15 |
| 8.1 General..... | 15 |
| 8.1.1 Determination of the junction line | 15 |
| 8.1.2 Determination of protected volume | 15 |
| 8.2 Hazards due to sound level | 17 |
| 8.2.1 Requirement..... | 17 |
| 8.2.2 Test method | 17 |
| 8.3 \triangleleft Entrapment hazards..... | 18 |
| 8.3.1 Requirement..... | 18 |
| 8.4 Hazards due to falling of the child | 18 |
| 8.4.1 Angles..... | 18 |
| 8.4.2 Restraint system | 24 |
| 8.5 Hazards due to moving parts | 25 |
| 8.5.1 Requirements for compression points | 25 |
| 8.5.2 Requirements for shear points | 25 |
| 8.6 Hazards due to folding of the product | 25 |
| 8.6.1 Requirements..... | 25 |
| 8.6.2 Test methods | 26 |
| 8.7 \triangleleft Entanglement hazards (see A.4.3)..... | 26 |
| 8.7.1 Requirements..... | 26 |
| 8.7.2 Test method | 27 |
| 8.8 Choking and ingestion hazard..... | 27 |
| 8.8.1 Requirements..... | 27 |

| | | |
|--------|--|----|
| 8.8.2 | Test methods..... | 27 |
| 8.9 | Suffocation hazards from packaging materials..... | 28 |
| 8.10 | Hazards from edges, corners and protruding parts | 29 |
| 8.11 | Hazards from inadequate structural integrity | 29 |
| 8.11.1 | Static strength..... | 29 |
| 8.11.2 | Durability of powered swinging mechanisms | 29 |
| 8.11.3 | Reclining system..... | 29 |
| 8.12 | Hazards from inadequate stability | 30 |
| 8.12.1 | Requirements | 30 |
| 8.12.2 | Test method for static stability | 30 |
| 8.12.3 | Test method for dynamic stability | 30 |
| 8.13 | Hazards from possible movement of the infant swing on the floor | 31 |
| 8.13.1 | Requirement | 31 |
| 8.13.2 | Test method..... | 31 |
| 8.14 | Electrical hazards..... | 31 |
| 8.14.1 | General..... | 31 |
| 8.14.2 | Leakage prevention..... | 31 |
| 8.14.3 | Test methods..... | 31 |
| 9 | Product information | 32 |
| 9.1 | General..... | 32 |
| 9.2 | Marking of the product..... | 32 |
| 9.2.1 | General requirements | 32 |
| 9.2.2 | Requirements for infant swings with electrical components | 33 |
| 9.2.3 | Durability of marking | 34 |
| 9.2.4 | Test method for durability of marking..... | 34 |
| 9.3 | Purchase information | 34 |
| 9.4 | Instructions for use | 35 |
| 9.4.1 | General..... | 35 |
| 9.4.2 | Warnings | 35 |
| 9.4.3 | Additional information | 35 |
| 9.4.4 | Requirements for infant swings with electrical components | 36 |
| | Annex A (informative) Rationales | 37 |
| A.1 | General (see Clause 1) | 37 |
| A.2 | ☒ Chemical hazards (see Clause 6) | 37 |
| A.3 | Protective volume and protective barriers (see 8.1.2 and 8.1.2.2)..... | 37 |
| A.4 | Hazards due to sound level (see 8.2) | 37 |
| A.5 | Hazards due to detachment of toy bars..... | 38 |
| A.6 | Hazards from possible movement of the infant swing on the floor (see 8.13) | 38 |
| A.7 | ☒ Hazards due to falling of the child (see 8.4)..... | 38 |
| | Annex B (informative) A-deviation | 39 |
| | Annex C (normative) Warnings | 40 |
| | Bibliography..... | 66 |

EN 16232:2013+A2:2023 (E)**European foreword**

This document (EN 16232:2013+A2:2023) has been prepared by Technical Committee CEN/TC 252 "Child care articles", the secretariat of which is held by AFNOR.

Ⓐ2 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 March 2024 and conflicting national standards shall be withdrawn at the latest by September 2024. ⓒ2

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1 approved by CEN on 16 April 2018, and Amendment 2 approved by CEN on 25 December 2022.

This document supersedes ⓒ2 EN 16232:2013+A1:2018 ⓒ2.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⓑ1 ⓑ1 and ⓒ2 ⓒ2.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This European Standard specifies safety requirements and the corresponding test methods for infant swings intended for children up to a weight of 9 kg or unable to sit up unaided.

If an infant swing has several functions or can be converted into another function, the relevant European Standards apply to it.

Swings falling under the scope of EN 71-8 are excluded from the scope of this European Standard.

See rationale in A.1.

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 71-2:2011+A1:2014, *Safety of toys — Part 2: Flammability* ⓒ

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

Ⓐ EN 71-10:2005, *Safety of toys — Part 10: Organic chemical compounds — Sample preparation and extraction* ⓒ

Ⓐ EN 71-11, *Safety of toys — Part 11: Organic chemical compounds — Methods of analysis* ⓒ

Ⓐ EN 622-1, *Fibreboards — Specifications — Part 1: General requirements* ⓒ

Ⓐ EN 717-1, *Wood-based panels — Determination of formaldehyde release — Part 1: Formaldehyde emission by the chamber method* ⓒ

Ⓐ deleted text ⓒ

EN 61558-2-7, *Safety of power transformers, power supplies, reactors and similar products — Part 2-7: Particular requirements and tests for transformers and power supplies for toys (IEC 61558-2-7)*

EN 61558-2-16, *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V — Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units (IEC 61558-2-16)*

EN 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications (IEC 61672-1)*

EN 61672-2, *Electroacoustics — Sound level meters — Part 2: Pattern evaluation tests (IEC 61672-2)*

EN 62115:2005, *Electric toys — Safety (IEC 62115:2003, modified + A1:2004)*

EN ISO 3746:2010, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:2010)*

Ⓐ EN ISO 14184-1, *Textiles — Determination of formaldehyde — Part 1: Free and hydrolysed formaldehyde (water extraction method) (ISO 14184-1)* ⓒ

koniec náhľadu – text d'alej pokračuje v platenej verzii STN