DIN EN 1130:2020-02 (E)

Children's furniture - Cribs - Safety requirements a nd test methods

Contents

Page

European foreword 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 General test conditions 7
4.1 Preliminary preparation 7
4.2 Application of Forces 7
4.3 Tolerances 8
4.4 Definition of the protected volume 8

5 Test equipment 8
5.1 General 8
5.2 Test mass 8
5.3 Entrapment test probes 8
5.3.1 Finger probes with hemispherical end 8
5.3.2 Finger probe for mesh 9
5.3.3 Other probes 9
5.3.4 Small head probe 9
5.3.5 Large head probe 10
5.3.6 Shape assessment probe 10
5.4 Side impactor 11
5.5 Stops 12
5.6 Small parts cylinder 12
5.7 Test platform 13
5.7.1 Mattress support 13
5.7.2 Test mattress 13
5.8 Test bar 13
5.9 Test plate 13
5.10 Template for V-shaped openings 14
5.11 Feeler gauge 15
5.12 Aluminium oxide abrasive paper 15

6 Chemical hazards (see A.2) 15
6.1 Migration of certain elements 15
6.2 Formaldehyde 16

7 Flammability hazards (see A.3) 16

8 Mechanical hazards 16
8.1 Crib base inclination 16
8.2 Entrapment hazards from gaps and openings (see A.4) 16
8.2.1 Finger entrapment hazards 16
8.2.2 Other entrapment hazards 17
8.2.3 Entrapment hazards outside the crib 17
8.2.4 Test method for holes, gaps and openings 17
8.3 Hazards from moving parts 20
8.3.1 Shearing and crushing hazards 20
8.3.2 Hazards due to body weight 21
8.3.3 Hazards due to unintentional folding of the crib 21
8.4 Hazards due to the movements of the product (see A.5) 21
8.4.1 Hazards due to the movement of cradles and suspended cribs 21

8.4.2 Castors and wheels ... 22
8.4.3 Locking system for foldable or adjustable legs and feet ... 23
8.5 Falling hazards ... 23
8.5.1 Height of sides and ends ... 23
8.5.2 Hazards due to inadvertent release of adjustable sides ... 23
8.5.3 Locking system for adjustment in height or angle of the base ... 24
8.5.4 Stability (see A.6) ... 24
8.5.5 Structural integrity of suspended cribs ... 25
8.6 Entanglement hazards (see A.7) ... 26
8.6.1 Requirements ... 26
8.6.2 Test method ... 26
8.7 Choking and ingestion hazards (see A.8) ... 27
8.7.1 Requirements ... 27
8.7.2 Test methods ... 27
8.8 Suffocation hazards ... 28
8.8.1 Hazards due to the deflection of the base ... 28
8.8.2 External suffocation hazards (see A.9) ... 29
8.8.3 Plastic packaging ... 29
8.9 Hazards from sharp points and edges ... 29
8.9.1 General requirement ... 29
8.9.2 Requirement on attachment devices for suspended cribs (see A 9) ... 29
8.10 Hazards due to bedside sleeping (see A.11) ... 29
8.10.1 Hazards due to the drop side (see A.12) ... 29
8.10.2 Hazards from bedside sleepers disengagement (see A.13) ... 29
8.10.3 Bedside sleeper attachment system ... 30
8.11 Structural integrity ... 31
8.11.1 Connecting screws ... 31
8.11.2 Static strength ... 31
8.11.3 Strength of sides, structural members of the sides, ends and corners ... 32
8.11.4 Vertical static load ... 33

9 Mattresses ... 34

10 Product information (see A.14) ... 34
10.1 General ... 34
10.2 Marking ... 34
10.3 Purchase information ... 35
10.4 Instructions for use ... 36
10.4.1 General ... 36
10.4.2 Warnings ... 36
10.4.3 Information for all cribs ... 36
10.4.4 Information for suspended cribs ... 37
10.4.5 Information for bedside sleepers ... 38

Annex A (informative) Rationale ... 39

A.1 General ... 39
A.2 Rationale for Chemical Requirements (Clause 6) ... 39
A.3 Rationale for requirements on ignitability and flash effect (Clause 7) ... 39
A.4 Requirements for entrapment hazards (8.2) ... 40
A.5 Requirements for hazards due to the movement of cradles and suspended cribs (8.4.1) ... 40
A.6 Requirements for stability (8.5.4) ... 40
A.7 Requirements for entanglement hazards (8.6) ... 40
A.8 Requirements for choking hazards and ingestion hazards (8.7) ... 41
A.9 Requirements for external suffocation hazards (8.8.2) ... 41
A.10 Requirements on attachment devices of suspended cribs (8.9.2) ... 41
A.11 Requirements for bed side sleepers (8.10) ... 41
A.12 Requirements for drop sides (8.10.1) ... 42
A.13 Requirements for hazards due to bedside sleepers disengagement (8.10.3) ... 42
A.14 Product information (Clause 9) ... 42

Annex B (informative) A-deviations ... 43

Bibliography ... 45