# ISO/TS 24929-2:2025-08 (E)

## Child care articles - General safety - Part 2: Mechanical hazards

## Contents

Page


Foreword ..... vi

1 Scope ..... 1

2 Normative references ..... 1

3 Terms and definitions ..... 1

4 General requirements and test conditions ..... 3
4.1 Tolerances for test equipment ..... 3
4.2 General test conditions ..... 3

5 Mechanical hazards -- Safety philosophy ..... 3

6 Accessibility of mechanical hazards ..... 4
6.1 General ..... 4
6.2 Accessibility areas ..... 4
6.3 Product information ..... 4

7 Entrapment hazards ..... 4
7.1 General ..... 4
7.2 Entrapment of head and neck ..... 6
7.2.1 Rationale ..... 6
7.3 Requirements ..... 8
7.4 Test equipment ..... 8
7.4.1 Probe philosophy ..... 8
7.4.2 Selection and use of probes ..... 12
7.5 Test methodology ..... 13
7.5.1 Feet-first openings ..... 13
7.5.2 Head-first openings ..... 13
7.5.3 Partially bound, V-shaped and irregular-shaped openings ..... 13
7.6 Entrapment of fingers ..... 15
7.6.1 Rationale ..... 15
7.6.2 Requirements ..... 16
7.6.3 Test equipment ..... 16
7.6.4 Test methodology ..... 18
7.7 Rationale for entrapment of limbs, feet and hands ..... 18

8 Hazards from moving parts ..... 18
8.1 Rationale ..... 18
8.2 General ..... 18
8.3 Shearing hazards ..... 19
8.3.1 Requirements ..... 19
8.3.2 Test equipment ..... 19
8.3.3 Test method ..... 19
8.4 Requirements for crushing hazards ..... 19

9 Hazards with products designed to fold for storage and transportation ..... 20
9.1 Rationale ..... 20
9.2 Requirements ..... 20
9.2.1 General ..... 20
9.2.2 Unintentional release of locking mechanisms ..... 20

9.3 Test methodology ..... 20
9.3.1 Endurance test ..... 20
9.3.2 Strength test ..... 20

10 Hazards related to attachment mechanisms and opening and closing systems ..... 20
10.1 Rationale ..... 20
10.2 Requirement ..... 21
10.3 Test methodology ..... 21

11 Entanglement hazards ..... 21

11.1 Snagging hazards ..... 21
11.1.1 Rationale ..... 21
11.1.2 Requirements ..... 21
11.1.3 Test equipment ..... 21
11.1.4 Test methodology for loop and mass ..... 23
11.2 Cords, ribbons and parts used as ties ..... 24
11.2.1 Rationale ..... 24
11.2.2 Requirements ..... 24
11.2.3 Test methodology ..... 25
11.3 Loops ..... 25
11.3.1 Rationale ..... 25
11.3.2 Requirements ..... 25
11.3.3 Test methodology ..... 25

12 Choking hazards ..... 26
12.1 General ..... 26
12.2 Hazard due to small components ..... 26
12.2.1 Rationale ..... 26
12.2.2 Requirements ..... 26
12.2.3 Test equipment ..... 26
12.2.4 Test methodology ..... 29
12.3 Accessibility of filling materials ..... 30
12.3.1 Rationale ..... 30
12.3.2 Requirement ..... 30
12.3.3 Test equipment ..... 31
12.3.4 Test methodology ..... 32
12.4 Airway obstruction ..... 32
12.4.1 Rationale ..... 32
12.4.2 Protective mechanisms of the airway ..... 33
12.4.3 Requirements ..... 33
12.4.4 Test equipment ..... 34
12.4.5 Test methodology ..... 34

13 Suffocation hazards ..... 34
13.1 General ..... 34
13.2 Plastic decals and sheeting ..... 35
13.2.1 Rationale ..... 35
13.2.2 Requirements ..... 35
13.2.3 Determination of hazard ..... 35
13.2.4 Test methodology ..... 35
13.3 Non-air-permeable packaging ..... 36
13.3.1 Rationale ..... 36
13.3.2 Requirements -- Packaging ..... 36
13.3.3 Test equipment ..... 37
13.3.4 Test methodology ..... 37
13.4 Ventilation ..... 37

14 Sleeping environment hazards ..... 37

15 Ingestion hazards ..... 37
15.1 Rationale ..... 37

15.2 Ingestion of small components ..... 38
15.2.1 Requirements ..... 38
15.2.2 Test methodology ..... 38

16 Hazardous from edges and protrusions ..... 39
16.1 General ..... 39
16.2 Edges ..... 39
16.2.1 Rationale ..... 39
16.2.2 Requirements -- Edges on products and components ..... 39
16.2.3 Test methodology ..... 39

16.3 Rigid protruding parts ..... 39
16.3.1 Rationale ..... 39
16.3.2 Requirements ..... 39
16.3.3 Test methodology ..... 39
16.4 Points and wires ..... 40
16.4.1 Rationale ..... 40
16.4.2 Requirement ..... 40
16.5 Monofilament threads ..... 40

17 Structural integrity ..... 40
17.1 General ..... 40
17.2 Material suitability ..... 41
17.2.1 Rationale ..... 41
17.2.2 Requirements ..... 41
17.3 Strength and durability of the product ..... 41
17.3.1 Rationale ..... 41
17.3.2 Requirements ..... 41
17.3.3 Test methodology ..... 41

18 Protective function ..... 42
18.1 General ..... 42
18.2 Barrier function ..... 42
18.2.1 Rationale ..... 42
18.2.2 Requirements ..... 42
18.2.3 Test methodology ..... 43
18.3 Restraint systems ..... 43
18.3.1 Rationale ..... 43
18.3.2 Requirements ..... 43
18.3.3 Test equipment ..... 44
18.3.4 Test methodology ..... 45
18.4 Footholds ..... 46
18.4.1 Rationale ..... 46
18.4.2 Requirements ..... 46
18.4.3 Test equipment ..... 46
18.4.4 Determination of a foothold ..... 47

19 Hazard associated with stability ..... 52
19.1 Rationale ..... 52
19.2 General requirement ..... 52

Bibliography ..... 53