

FINAL DRAFT Technical Specification

ISO/DTS 24929-2

Child care articles — General safety —

Part 2:

Mechanical hazards iTeh Standar

Document Preview

ISO/TC 310

Secretariat: AFNOR

Voting begins on: 2025-05-20

Voting terminates on: 2025-07-15

https://standards.iteh.ai/catalog/standards/iso/ae6abb4a-8ca3-44c0-b89d-c65bff18888b/iso-dts-24929-2

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.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNO-LOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

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

ISO/DTS 24929-2

https://standards.iteh.ai/catalog/standards/iso/ae6abh4a-8ca3-44c0-b89d-c65bff18888b/iso-dts-24929-2



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents			Page	
Forewordvi				
1	Scop	ne	1	
2	Nori	native references	1	
3		ns and definitions		
	General requirements and test conditions			
4	4.1	Tolerances for test equipment		
	4.2	General test conditions		
5	Mec	hanical hazards — Safety philosophy		
	Accessibility of mechanical hazards			
6	6.1	General		
	6.2	Accessibility areas		
	6.3	Product information		
7	Fntr	apment hazards		
,	7.1	General		
	7.2	Entrapment of head and neck		
		7.2.1 Rationale	6	
	7.3	Requirements		
	7.4	Test equipment		
		7.4.1 Probe philosophy		
	7.5	7.4.2 Selection and use of probes		
	7.5	7.5.1 Feet-first openings		
		7.5.2 Head-first openings		
		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		
		7.6.3 Test equipment		
	ps://stai 7.7	7.6.4 Test methodology		
0	1			
8		ards from moving parts		
	8.1 8.2	Rationale		
	8.3	Shearing hazards		
	0.0	8.3.1 Requirements		
		8.3.2 Test equipment	19	
		8.3.3 Test method		
	8.4	Requirements for crushing hazards	20	
9	Haza	ards with products designed to fold for storage and transportation		
	9.1	Rationale		
	9.2	Requirements		
		9.2.1 General 9.2.2 Unintentional release of locking mechanisms		
	9.3	Test methodology		
	7.0	9.3.1 Endurance test		
		9.3.2 Strength test		
10	Ната	ards related to attachment mechanisms and opening and closing systems		
10	10.1	Rationale		
	10.2	Requirement		
	10.3	Test methodology		
11	Enta	nglement hazards	21	

	11.1	Snagging hazards		
		11.1.1 Rationale		
		11.1.2 Requirements		
		11.1.3 Test equipment	22	
		11.1.4 Test methodology for loop and mass	24	
	11.2	Cords, ribbons and parts used as ties	24	
		11.2.1 Rationale	24	
		11.2.2 Requirements	25	
		11.2.3 Test methodology	25	
	11.3	Loops	25	
		11.3.1 Rationale	25	
		11.3.2 Requirements	26	
		11.3.3 Test methodology	26	
12	Choking hazards			
12	12.1	General		
	12.1	Hazard due to small components		
	12.2	12.2.1 Rationale		
		12.2.2 Requirements		
		12.2.3 Test equipment		
		12.2.4 Test methodology	29	
	12.3	Accessibility of filling materials		
	12.5	12.3.1 Rationale		
		12.3.2 Requirement		
		12.3.3 Test equipment		
		12.3.4 Test methodology		
	12.4	Airway obstruction	32	
	12.1	Airway obstruction 12.4.1 Rationale	32	
		12.4.2 Protective mechanisms of the airway	33	
		12.4.3 Requirements	33	
		12.4.4 Test equipment		
		12.4.5 Test methodology		
13	Suffo	ocation hazards	24	
13	13.1	General		
	12.2			
	s://stan	Plastic decals and sheeting	0-dts-24929-35	
		13.2.2 Requirements		
		13.2.3 Determination of hazard		
		13.2.4 Test methodology		
	13.3	Non-air-permeable packaging		
	15.5	13.3.1 Rationale		
		13.3.2 Requirements — Packaging		
		13.3.3 Test equipment		
		13.3.4 Test methodology		
	13.4	Ventilation		
14		oing environment hazards		
15	_	stion hazards		
	15.1	Rationale		
	15.2	Ingestion of small components		
		15.2.1 Requirements		
		15.2.2 Test methodology	38	
16	Haza	rdous from edges and protrusions	39	
	16.1	General		
	16.2	Edges		
		16.2.1 Rationale		
		16.2.2 Requirements — Edges on products and components	39	
		16.2.3 Test methodology		

	16.3	Rigid protruding parts	39
		16.3.1 Rationale	
		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	Struc	ctural integrity	40
	17.1	General	
	17.2	Material suitability	41
		17.2.1 Rationale	41
		17.2.2 Requirements	41
	17.3	Strength and durability of the product	
		17.3.1 Rationale	
		17.3.2 Requirements	
		17.3.3 Test methodology	41
18	Protective function		
	18.1	General	
	18.2	Barrier function	
		18.2.1 Rationale	
		18.2.2 Requirements	
		18.2.3 Test methodology	
	18.3	Restraint systems	
		18.3.1 Rationale	
		18.3.2 Requirements	43
		18.3.3 Test equipment	44
	10.4	18.3.4 Test methodology	45
	18.4	Footholds	
		18.4.1 Rationale 18.4.2 Requirements	40
		18.4.3 Test equipment	40 46
		18.4.4 Determination of a foothold	
4.5	22.		
19 ttp		ard associated with stability /iso/ae6abb4a-8ca3-44c0-b89d-c65bff18888b/iso-d	
	19.1	Rationale	
	19.2	General requirement	
Bibli	ograph	N	53

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 310, Child care articles.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO/DTS 24929-2

https://standards.iteh.ai/catalog/standards/iso/ae6abb4a-8ca3-44c0-b89d-c65bff18888b/iso-dts-24929-2

Child care articles — General safety —

Part 2:

Mechanical hazards

1 Scope

This document specifies requirements and gives guidance on mechanical hazards for developing safety standards for child care articles which are intended for children from birth to 48 months.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 4593, Plastics — Film and sheeting — Determination of thickness by mechanical scanning

3 Terms and definitions

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

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

https://standarda.itah.ai/aatalag/standarda/isa/aa6abh/a.8aa2

3.1

ageing

change of properties of a material due to exposure to environmental factors

Note 1 to entry: Environmental factors can include temperature, humidity, ultra-violet (UV) radiation, and cleaning agents.

3.2

completely bound opening

opening that is continuously surrounded on all sides by the material of a product

EXAMPLE See Figure 2.

3.3

crotch restraint

device designed to be positioned between a child's legs to prevent the child from sliding forward

3.4

harness anchorage point

attachment point suitable for the attachment of an additional child's safety harness

3.5

irregular-shaped opening

opening that does not have a symmetrical shape

EXAMPLE See Figure 5.