
Safety of toys —

Part 4:

**Swings, slides and similar activity
toys for indoor and outdoor family
domestic use**

Sécurité des jouets —

*Partie 4: Balançoires, glissoires et jouets à activité similaire à usage
domestique familial intérieur et extérieur*



This document is a preview generated by EBS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	6
4.1 General	6
4.2 Barriers	10
4.3 Rung ladders, stepladders and stairways	11
4.4 Entrapment	12
4.5 Stability of activity toys other than slides, swings and toys with crossbeams	14
4.6 Slides	15
4.7 Swings	18
4.8 Seesaws	21
4.9 Carousels and rocking toys	22
4.10 Inflatable activity toys	22
4.11 Paddling pools	24
5 Warnings and labelling	25
5.1 Labelling	25
5.2 Assembly and installation instructions	25
5.3 Maintenance instructions	26
5.4 Warnings	27
6 Test methods	28
6.1 Stability	28
6.2 Static strength	37
6.3 Dynamic strength of barriers and handrails	38
6.4 Determination of impact from swing elements	39
6.5 Test for head and neck entrapment	42
6.6 Toggle test	47
6.7 Test for protrusions	50
6.8 Durability test for suspension connectors and means of suspension	53
6.9 Deflation of inflatable activity toys	55
6.10 Static load test for paddling pools with non-inflatable walls	55
Annex A (informative) Rationale	56
Annex B (informative) Consumer information sheet for playground surfacing materials	60
Annex C (informative) Safety labelling guidelines for certain types of activity toys	61
Bibliography	63

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. www.iso.org/patents

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

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 181, *Safety of toys*.

This second edition cancels and replaces the first edition (ISO 8124-4:2010) and amendment 1 (ISO 8124-4:2010/Amd.1:2012). This edition incorporates the amendments ISO 8124-4:2010/Amd.1:2012 and ISO 8124-4:2010/Amd.2:2014.

ISO 8124 consists of the following parts, under the general title *Safety of toys*:

- *Part 1: Safety aspects related to mechanical and physical properties*
- *Part 2: Flammability*
- *Part 3: Migration of certain elements*
- *Part 4: Swings, slides and similar activity toys for indoor and outdoor family domestic use*
- *Part 6: Certain phthalate esters in toys and children's products*
- *Part 8: Age determination guidelines*

The following parts are under preparation:

- *Part 5: Determination of total concentration of certain elements in toys*
- *Part 7: Requirements and test methods for finger paints*

Introduction

This part of ISO 8124 is largely based upon existing standards in the European Union (EN 71-8) and in the United States (ASTM F1148).

However, it should not be construed that a toy manufactured in compliance with this part of ISO 8124 will be in full compliance with relevant national toy safety requirements in the market where the product is intended to be distributed. The user of this part of ISO 8124 is therefore advised to be aware of relevant national requirements.

Compliance with the requirements of this part of ISO 8124 will minimize potential hazards associated with toys resulting from their use in their intended play modes (normal use) as well as unintended play modes (reasonable foreseeable abuse).

This part of ISO 8124 will not, nor is it intended to, eliminate parental responsibility in the appropriate selection of toys. In addition, this part of ISO 8124 will not eliminate the need for parental supervision in situations where children of various ages may have access to the same toy(s).

Safety of toys —

Part 4:

Swings, slides and similar activity toys for indoor and outdoor family domestic use

1 Scope

This part of ISO 8124 specifies requirements and test methods for activity toys for domestic family use intended for children under 14 years to play on or in.

Products covered by this part of ISO 8124 include swings, slides, seesaws, carousels, rocking toys, climbing frames, fully enclosed toddler swing seats and other products intended to bear the mass of one or more children.

Products not included within the scope of this part of ISO 8124 are:

- a) fitness and sporting equipment unless attached to the activity toy;
- b) equipment intended for use in schools, day care centres, kindergartens, public playgrounds, restaurants, shopping centres and similar public places;
- c) juvenile care products such as, but not limited to, infant swings, playpens/enclosures, beds or furniture including picnic tables, cradle rockers and products specifically designed for therapeutic use.

Inflatable activity toys are included in the scope of this part of ISO 8124. However, a powered blower used to continuously inflate the toy is not covered by this part of ISO 8124 since it is considered to be a household appliance and covered by requirements given in IEC 60335-2-80.

See [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.

ISO 8124-1, *Safety of toys — Part 1: Safety aspects related to mechanical and physical properties*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO 8124-1 and the following apply.

3.1

activity toy

toy intended for family domestic use, intended to bear the mass of one or more children, the support structure of which remains stationary while the activity is taking place and which is intended for the performance by a child of any of the following activities: climbing, swinging, sliding, rocking, spinning, jumping, bouncing, crawling and creeping, or any combination thereof

EXAMPLE Swings, slides, carousels and climbing frames (see [Figure 1](#)).

Note 1 to entry: Aquatic toys, paddling pools, trampolines and ride-on vehicles are not considered as activity toys in the context of this part of ISO 8124.