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Safety of toys —

Part 1: Safety aspects related to mechanical and physical properties

Sécurité des jouets —

Partie 1: Aspects de sécurité relatifs aux propriétés mécaniques et physiques

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Contents

Page

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Foreword

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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 (see www.iso.org/directives).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 181, *Safety of toys*.

This fifth edition cancels and replaces the fourth edition (ISO 8124-1:2014). A list of the main technical changes made to the previous edition is given in Annex G.

A list of all parts in the ISO 8124 series can be found on the ISO website.

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Introduction

This document is largely based upon existing standards in the European Union (EN 71-1) and in the United States of America (ASTM F963).

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

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

Although Annexes A, B, C, D, E and F are for information purposes only, they are crucial for the correct interpretation of this document.

The safety of electric toys is described in IEC 62115.

When age indications are required for safety labelling purposes, they may be given in either months or years.

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Safety of toys —

Part 1:
Safety aspects related to mechanical and physical properties

1 Scope

The requirements in this document apply to all toys, i.e. any product or material designed or clearly intended for use in play by children under 14 years of age. They are applicable to a toy as it is initially received by the consumer and, in addition, they apply after a toy is subjected to reasonably foreseeable conditions of normal use and abuse unless specifically noted otherwise.

The requirements of this document specify acceptable criteria for structural characteristics of toys, such as shape, size, contour, spacing (e.g. rattles, small parts, sharp points and edges, and hinge-line clearances) as well as acceptable criteria for properties peculiar to certain categories of toy (e.g. maximum kinetic energy values for non-resilient-tipped projectiles and minimum tip angles for certain ride-on toys).

This document specifies requirements and test methods for toys intended for use by children in various age groups from birth to 14 years. The requirements vary according to the age group for which a particular toy is intended. The requirements for a particular age group reflect the nature of the hazards and the expected mental and/or physical abilities of a child to cope with them.

This document also requires that appropriate warnings and/or instructions for use be given on certain toys or their packaging. Due to linguistic problems which may occur in different countries, the wording of these warnings and instructions is not specified but given as general information in Annex B. It should be noted that different legal requirements exist in many countries with regard to such marking.

This document does not purport to cover or include every conceivable potential hazard of a particular toy or toy category. Except for labelling requirements indicating the functional hazards and the age range for which the toy is intended, this document has no requirements for those characteristics of toys which represent an inherent and recognized hazard which is integral to the function of the toy.

EXAMPLE 1 An example of such a hazard is the sharp point necessary for the proper function of a needle. The needle is a hazard which is well understood by the purchaser of a toy sewing kit, and the functional sharp-point hazard is communicated to the user as part of the normal educational process of learning to sew as well as at the point of purchase by means of cautionary labelling on the product's packaging.

EXAMPLE 2 As a further example, a two-wheeled toy scooter has inherent and recognized hazards associated with its use (e.g. instability during use, especially while learning). The potential hazards associated with its structural characteristics (sharp edges, pinch hazards, etc.) will be minimized by compliance with the requirements of this document.

Products not included within the scope of this document are:

a) bicycles, except for those considered to be toys, i.e. those having a maximum saddle height of 435 mm (see E.1, general);

b) slingshots;

NOTE "Slingshots" are also known as "catapults" and are usually held in the hand; examples are given in Figure 1. Toy versions of medieval catapults and trebuchets are not exempt from this document; an example is given in Figure 2.

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