

(PREVIEW)
Indian Standard
SAFETY OF TOYS

**PART 1 SAFETY ASPECTS RELATED TO MECHANICAL AND
PHYSICAL PROPERTIES**

1 Scope

The requirements in this part of ISO 8124 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 part of ISO 8124 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 part of ISO 8124 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 part of ISO 8124 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 part of ISO 8124 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 part of ISO 8124 has no requirements for those characteristics of toys which represent an inherent and recognised 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 toy scooter has inherent and recognised hazards associated with its use (e.g. instability during use, especially whilst learning). The potential hazards associated with its structural characteristics (sharp edges, pinch hazards, etc.) will be minimized by compliance with the requirements of this part of ISO 8124.

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

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

NOTE "Slingshots" are also known as "catapults".

- c) darts with metal points;

- d) home and public playground equipment;
- e) compressed air- and gas-operated guns and pistols (see Clause E.1);
- f) kites (except for the electric resistance of their strings, which is included);
- g) model kits, hobby and craft items, in which the finished item is not primarily of play value;
- h) sporting goods and equipment, camping goods, athletic equipment, musical instruments and furniture; however, toys which are their counterparts are included.

It is recognised that there is often a fine distinction between, for example a musical instrument or a sporting item and its toy counterpart. The intention of the manufacturer or distributor, as well as normal use and reasonably foreseeable abuse, determines whether the item is a toy counterpart or not;

- i) models of aircraft, rockets, boats and land vehicles powered by combustion engines; however, toys which are their counterparts are included (see Clause E.1);
- j) collectible products not intended for children under 14 years of age;
- k) holiday decorations that are primarily intended for ornamental purposes;
- l) aquatic equipment intended to be used in deep water, swimming-learning devices and flotation aids for children such as swim-seats and swim-aids;
- m) toys installed in public places (e.g. arcades and shopping centres);
- n) puzzles having more than 500 pieces or without a picture, for specialists;
- o) fireworks including percussion caps, except percussion caps specifically designed for toys;
- p) products containing heating elements intended for use under the supervision of an adult in a teaching context;
- q) steam engines;
- r) video toys that can be connected to a video screen and operated at a nominal voltage greater than 24 V;
- s) babies' pacifiers (dummies);
- t) faithful reproduction of firearms;
- u) electric ovens, irons or other functional products operated at a nominal voltage greater than 24 V;
- v) bows for archery with an overall relaxed length exceeding 120 cm;
- w) fashion jewellery for children (see Clause E.1).

2 Normative references

The following referenced documents are indispensable for the application 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 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

ISO 3746:1995, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane*

ISO 4287, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters*

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

ISO 6508-1, *Metallic materials — Rockwell hardness test — Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)*

ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane*

ISO 11202, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Survey method in situ*

ISO 11204, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Method requiring environmental corrections*

IEC 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications*

IEC 61672-2, *Electroacoustics — Sound level meters — Part 2: Pattern evaluation tests*