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ISO/TC **181**

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Safety of toys —

Part 1:
Safety aspects related to mechanical and physical properties

AMENDMENT 2: Various

Sécurité des jouets —

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

AMENDEMENT 2: .

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

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

Safety of toys —

Part 1:
Safety aspects related to mechanical and physical properties

AMENDMENT 2: Various

3 Terms and Definitions

Replace the existing terminological entries with the following:

3.39
large and bulky toy
toy that has a projected base area of more than 0,26 m^2 or a volume of more than 0,08 m^3, calculated without regard to minor appendages, or a mass of 4,5 kg or more

Note 1 to entry The base area for toys having permanently attached legs is measured by calculating the area enclosed by straight lines connecting the outermost edge of each leg of the perimeter.

3.48
paper
sheet formed by irregularly intervened cellulose fibres with a mass per unit area of 400 g/m^2 or less

Note 1 to entry If paper with polymeric lamination, or other treatments which may be resistant to wetting, no longer presents the same properties as paper, then it is not treated as such.

3.50
pompom
lengths or strands of fibre, yarn or thread clamped or secured and tied in the centre, and brushed up to form a substantially spherical, ovoid or ellipsoidal shape

Note 1 to entry This definition includes substantially spherical-, ovoid- and ellipsoidal-shaped attachments made of stuffed materials (see Figure 5).

Note 2 to entry Tassels with long strands are not considered pompoms (see Figure 6).

Figure 5 — Regular and rounded pompoms

Figure 6 — Tassel with long strands

Add the following new terminological entry:

3.XX
paperboard
sheet formed by irregularly intervened cellulose fibres with a mass per unit area over 400 g/m^2, excluding pressed wooden fibreboards such as medium density fibreboard (MDF), chipboard and materials with similar properties

Note 1 to entry The term paperboard also includes materials commonly referred to as card or cardboard with a mass per unit area over 400 g/m^2.

Note 2 to entry If paper or paperboard with polymeric lamination, or other treatments which may be resistant to wetting, no longer present the same properties as paper, then they are not treated as such.

Insert the following new paragraph in 4.4.1, (For children under 36 months) directly after the bullet list as the second to last paragraph:

Additionally, toys, components of toys and removable components thereof made entirely of paperboard, that do not fit entirely in the cylinder when tested in accordance with 5.2 (Small parts test), are exempt from testing in accordance with 5.24 (Reasonably foreseeable abuse tests).

Modify the first paragraph of 4.16.1 and Figure 17 as follows:

4.16.1 Ventilation

Any toy, made of impermeable material and having a door or lid, which encloses a continuous volume greater than 0,03 m^3 and in which all internal dimensions are 150 mm or more, shall provide means for breathing by the incorporation of unobstructed ventilation openings. These ventilation openings shall consist of a minimum of either two openings, each having a total area of at least 650 mm^2 and placed at least 150 mm apart, or one opening which is the equivalent of the two 650 mm^2 openings expanded to include the separation area, provided this leaves opening areas of 650 mm^2 on either side of a 150 mm spacing (see Figure 17).

Dimensions in millimetres

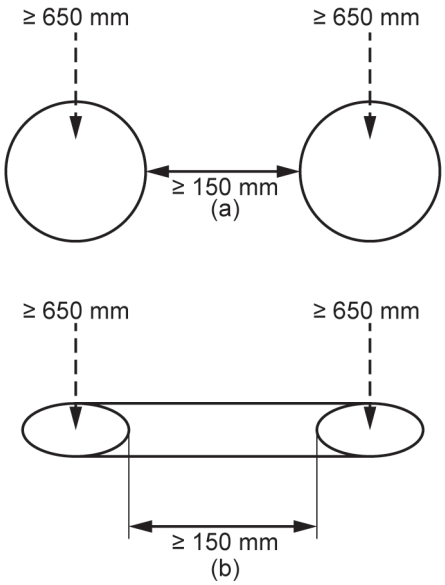


Figure 17 — Example of an equivalent single ventilation opening

Modify the first paragraph and the last bullet point of 4.18.4.3 as follows:

4.18.4.3 Arrows (e.g. bow and arrow set)

Projectiles in the form of an arrow with a kinetic energy greater than 0,08 J when tested according to 5.15.1 (Kinetic energy of projectiles) shall have a maximum kinetic energy per area of contact not greater than 2 500 J/m^2 when determined in accordance with 5.15.1.3.3 (determination of kinetic energy per area of contact).

— if the projectile is made of a resilient material and has a kinetic energy greater than 0,08 J when tested according to 5.15.1, it shall continue to have a maximum kinetic energy per area of contact not greater than 2 500 J/m2 when determined in accordance with 5.15.1.3.3.

Add the following new subclause:

4.32 Jaw entrapment in handles and steering wheels

4.32.1 See E.46. These requirements are intended to address potential jaw entrapment in handles and steering wheels that are located such that they are accessible for teething in the following categories of toys intended for children under 18 months of age: activity tables intended to be played with by a standing child, large and bulky toys, stationary floor toys, toys intended to be pushed by a child walking upright and ride-on toys.

4.32.2 Handles that are connected to the toy with a hinge and handles made from a pliable material (for example, straps and ropes) are exempt from this requirement.

4.32.3 When tested in accordance with 5.38 (Jaw entrapment test), openings in handles and steering wheels that allow the small test fixture to pass completely through shall also allow the large test fixture to pass completely through.

Replace the existing 5.24.3 with the following:

5.24.3 Tip-over test for large and bulky toys

See E.3

Large and bulky toys shall not be tested according to 5.24.2 (Drop test), but in accordance with the following procedure:

Place the toy on a horizontal surface, as prescribed in 5.24.2 (Drop test). Attempt to tip it over by pushing it slowly past its centre of balance three times, one of which shall be in its most onerous position. Gradually apply a force, which is not to exceed 120 N, in a horizontal direction and 1 500 mm above the horizontal surface or at the top edge of the toy for toys less than 1 500 mm in height. A non-resilient step with a height of (25 ± 2) mm shall be positioned such that it prevents sliding or rolling of the toy during the test.

The original point of application relative to the toy shall be maintained, and the force shall remain horizontal, throughout the test. The vertical position of the point of application relative to the horizontal surface is permitted to increase during the test.

If a force greater than 120 N is required to bring the toy beyond its centre of balance, or if the vertical position of the point of application, relative to the horizontal surface, exceeds 1 800 mm, the tip-over test shall be stopped. The test shall also be stopped if the toy slides or rolls over the non-resilient step without tipping over (see Figure X).

After each tip-over, the toy shall be allowed to come to rest and shall be examined and evaluated before continuing.

Toys supplied with anchors and intended to be permanently fixed (e.g. in concrete) when in use, according to the manufacturer's instructions, shall not be subjected to the tip-over test.

Determine whether the toy continues to conform to the relevant requirements of Clause 4 (Requirements).

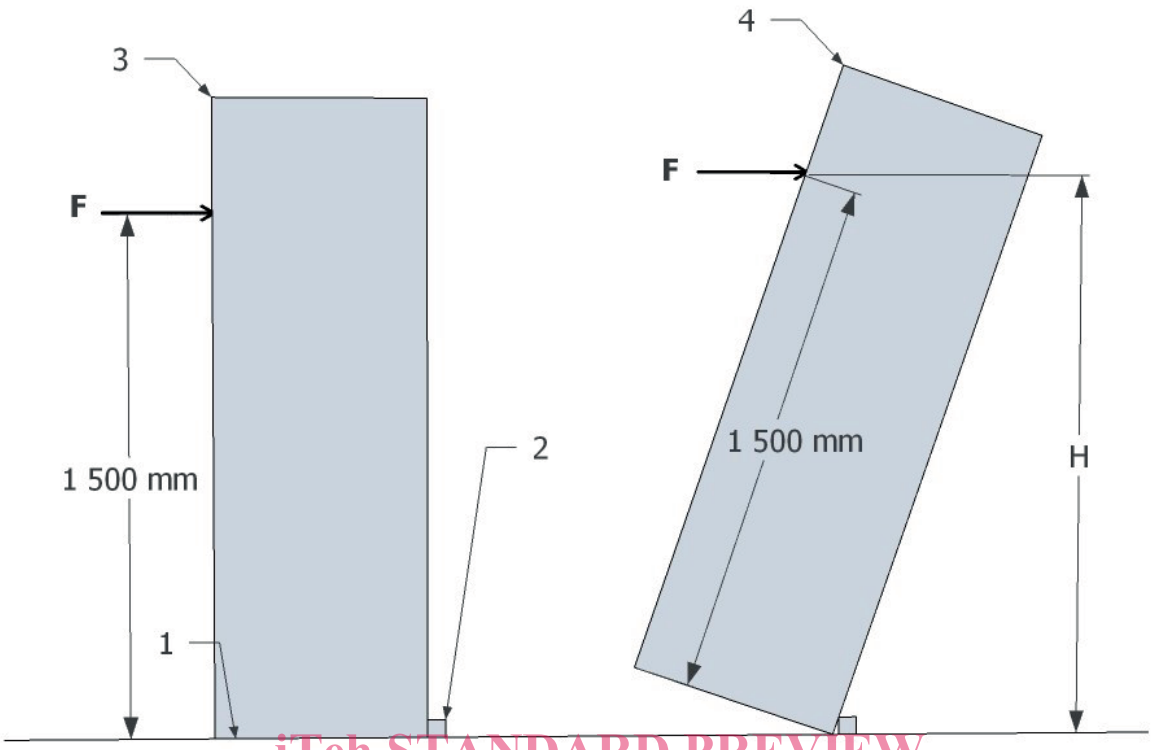


Figure X — Tip-over test for large and bulky toys

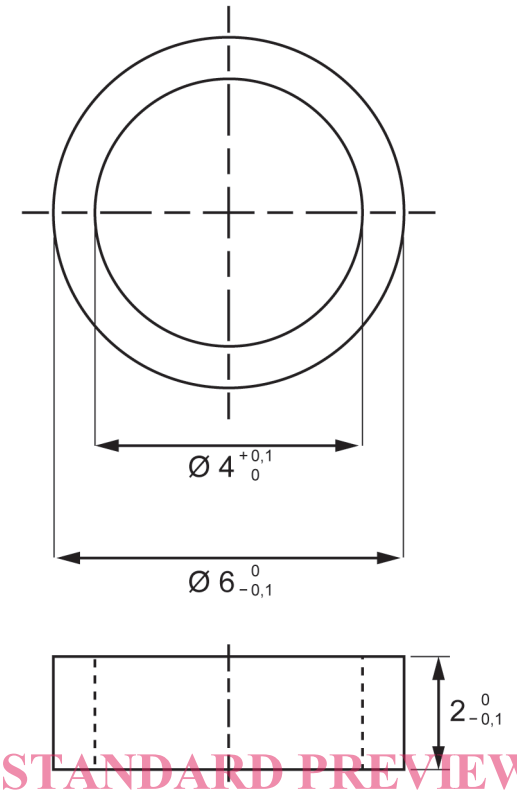
Key

1 test surface
2 25 mm step
3 toy at rest
4 toy during tipping
F force direction and application point
H height not to exceed 1 800 mm

Replace the existing Figure 44 as follows and change the text for dimensions and tolerances:

5.36 Tip assessment of rigid projectiles

Dimensions in millimetres



Dimensions and tolerances:

Height	2 mm +0/−0,1 mm
Inner diameter	4 mm +0,1/−0 mm
Outer diameter	6 mm +0/-0,1 mm

NOTE A small handle may be added to the outer wall of the gauge to assist use.

Figure 44 — Cylindrical gauge for measurement of projectile tips

Add the following new subclause:

5.38 Jaw entrapment test

Test fixtures can be made of any rigid material. The test fixture shall be applied to the opening with an orientation such that the 19 mm dimension (small test fixture) and the 63,5 mm dimension (large test fixture) are parallel with the major dimension of the handle or steering wheel opening (see Figure XX).