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NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Electric toys - Safety

Jouets électriques - Sécurité

Sample Document

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Electric toys -
Safety****AMENDMENT 1****FOREWORD**

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Amendment 1 to IEC 62115:2017 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this Amendment is based on the following documents:

| Draft | Report on voting |
|--------------|------------------|
| 61/7472/FDIS | 61/7503/RVD |

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications/.

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- reconfirmed,
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- revised.

The content of the corrigendum 1 (2025-10) has been included in this copy.

3 Terms and definitions

3.4.2

power supply for toys

Replace, in the definition, "of 24 V" with "not exceeding 24 V".

Add, after 3.5.4, the following new definition:

3.5.5

mobile electric toy

self-propelled **electric toy** capable of moving from a location to another under its own force

Note 1 to entry: An **electric toy** with moving part but unable to move from one location to another is not a **mobile electric toy**.

3.6.2

battery box

Replace the existing term and definition with the following:

battery

assembly of one or more **cells** ready for use as a source of electrical energy, characterized by its voltage, size, terminal arrangement, capacity and rated capability

Note 1 to entry: A **detachable battery** and **separable battery** have an enclosure that is equivalent in properties to that of the **electric toy** itself.

Add, after 3.6.9, the following new definitions:

3.6.10

cell

basic functional unit, consisting of an assembly of electrodes, electrolyte, container, terminals, and usually separators, that is a source of electric energy obtained by direct conversion of chemical energy

[SOURCE: IEC 60050-482:2004, 482-01-01]

3.6.11

detachable battery

battery in an enclosure separate from the **electric toy**, intended for use with specific **electric toys** and intended to be removed from the **electric toy**

Note 1 to entry: A **detachable battery** is not considered a **battery** that is replaceable.

3.6.12**separable battery**

battery contained in an enclosure separate from the **electric toy**, intended for use with specific **electric toys** and connected to the **electric toy** by a cord

Note 1 to entry: A standard automotive **battery** is not considered a **separable battery**.

Note 2 to entry: A **separable battery** is not considered a **battery** that is replaceable.

5 General conditions for tests**5.2 Preconditioning**

*In the fifth dashed item of the last paragraph, add "other than **electric toy scooters**" after "for wheeled ride-on **electric toys**".*

5.7.3 Toys using battery boxes

Replace the subclause title and text with the following:

5.7.3 Electric toys using detachable batteries or separable batteries

***Electric toys** intended for use with a **detachable battery** or a **separable battery** are tested with the **battery** supplied with the **electric toy** or with the **battery** recommended in the instructions.*

5.7.6 Electric toys using other power supplies

Replace the first sentence with the following:

***Electric toys** using a USB connection for a power supply shall be supplied with a voltage between 5 V and 20 V as applicable considering the USB protocol that can be supported by the **electric toy**.*

Replace, in Note 2, "cell" with "cell".

6 Criteria for reduced testing**6.2 Short-circuit resistance**

Replace the first sentence with the following:

Clause 8, Clause 9 except 9.6 and 9.8, and Clauses 10, 11, 13.3, 13.7, 17 and 18 are not applicable to **electric toys** that comply with the requirements of Clause 9, except 9.6 and 9.8, with any insulation between parts of different polarity short circuited in turn.

7 Marking and instructions**7.1 General**

Add the following new text after the last paragraph:

The warnings shall be preceded by the words "Warning" or "Warnings", as appropriate (i.e. instead of repeating the word "Warning" before each warning when several of the warnings in this document are present, the word "Warnings" may be used once). The word "Warning" and "Warnings" may be capitalized or followed by punctuation, e.g. an exclamation mark.

7.2.2 Electric toys with replaceable batteries

Replace the subclause title with the following:

Electric toys with replaceable batteries or separable batteries

Replace the first paragraph with the following:

Electric toys with replaceable batteries shall be marked with the shape of the **batteries**, together with the nominal voltage and polarity, in or on the **battery** compartment or other suitable place close to the **batteries** on the **electric toy**. The positive terminal shall be indicated by symbol IEC 60417-5005 (2002-10). It is acceptable to place these markings on or inside the **battery** compartment cover.

Delete the second paragraph.

Replace the third paragraph with the following:

Electric toys with separable batteries shall be marked with

- the nominal **battery** voltage, and
- the symbol for DC (symbol IEC 60417-5031 (2002-10)) shown in 7.2.6

in or on the **battery** compartment or other suitable place on the **electric toy**, close to the **battery** plug or socket.

This does not apply where connection to other **batteries** or power sources is prevented by construction.

7.2.3 Transformer toys and power supply toys

Replace the first dashed item with the following:

- their **rated voltage**, in volts, unless it is impossible to supply the **electric toy** with another voltage;

Add the following new note:

NOTE An example of **electric toy** that cannot be supplied with another voltage is a USB-C **electric toy** that cannot accept a voltage higher than intended by construction.

7.3.1 General

Add the following new paragraph before "Compliance is check by inspection":

In the case where an indication for a specific hazard is required on the packaging or to be visible at the time of purchase, it is possible to combine the indication of specific hazard with the indication for specific hazard related to the same age restriction from another toy standard if the specific hazard relating to this document is indicated in the instructions (e.g., small part).

7.3.2 Transformers toys and power supply toys

Add the following new text after "Warning: Not suitable for children under 3 years".

Alternatively, the following wording may be used:

WARNING: Not suitable for children under 36 months

7.3.3 Electric toys that are used with replaceable batteries

Replace the subclause title with the following:

Electric toys that are used with replaceable batteries, detachable batteries or separable batteries

7.3.3.1 General

In the paragraph after the last dashed item of the first paragraph, replace "battery box" with "detachable battery or by a separable battery".

7.3.3.2 Coin batteries

Replace the second paragraph with the following:

Alternatively, the packaging shall be marked with symbol ISO 7000-0790 (2004-01) and warning sign (yellow triangle) ISO 7010 W001 (2011-05) in conjunction with a supplementary sign containing a **coin battery** symbol IEC 60417-6367 (2017-11). The combination sign is to meet the rules in ISO 3864-1. This sign shall be placed next to symbol ISO 7000-0790 (2004-01).

Replace the second warning with the following:

WARNING: This product contains a coin battery. Hazardous if swallowed. A swallowed coin battery can cause serious internal chemical burns in as little as 2 hours and lead to death. Dispose of used batteries immediately. Keep new and used batteries away from children. If you think batteries might have been swallowed or placed inside any part of the body, immediately contact your local emergency services.

Delete the fourth paragraph, warning and note.

7.3.3.3 Button batteries

Replace the warning with the following:

WARNING: This product contains a button battery. Hazardous if swallowed or placed inside any part of the body. Risk of serious injury. Dispose of used batteries immediately. Keep new and used batteries away from children. If you think batteries might have been swallowed or placed inside any part of the body, immediately contact your local emergency services.

Add the following new subclause:

7.3.3.4 Spare small part batteries

Products supplied with spare **batteries** that fit wholly within the small parts cylinder as specified in 5.2 of ISO 8124-1:2014 shall carry the substance of the following warning in the instructions:

WARNING: This product contains a spare battery. Remove the spare battery and keep away from children.

7.6 Temperature warnings

Add the following new text after the warning:

Alternatively, the following wording may be used:

WARNING: Not suitable for children under 36 months

9 Heating and abnormal operation

9.1 General

In the sixth paragraph, replace "and electric toys using battery boxes" with ", detachable batteries or separable batteries".

9.4 Normal operation with insulation short-circuited

9.4.2 Steel pin test

Add the following new text after the first sentence:

The steel pin shall be free of coating, dirt, or rust.

Add the following new note:

NOTE Coating includes all types of varnish and lacquers that can impair the conductivity of the metal.