

## TÜV Rheinland LGA Products – Information

March 2021

### EN IEC 62115:2020: New version of safety standard for electrical toys

On 21 March 2020, the European Committee for Standardization CEN published [EN IEC 62115:2020](#) as a new version of the standard “Electric toys - Safety”. It applies to toys which have at least **one function dependent on electricity** (for example, song books with a sound function, remote-controlled cars, toy computers and electrical experimental sets).

EN IEC 62115:2020 will replace EN 62115:2005 and all of its amendments and corrigenda. This includes the following documents:

- EN 62115:2005
- EN 62115:2005/A11:2012
- EN 62115:2005/A11:2012/AC:2013
- EN 62115:2005/A12:2015
- EN 62115:2005/A2:2011
- EN 62115:2005/A2:2011/AC:2011

**Significant changes have been made in the following sections:**

#### **5.2 Preconditioning**

Drop test has been increased to 93 cm ± 5 cm, regardless of age group.

#### **7.2.3 Transformer Toys and Power Supply Toys**

Electric toys which are intended to charge rechargeable batteries by a power supply for toys, must be marked with the symbols and type designation of the power supply or be marked correspondingly as follows:

„Use only with <model designation> <power supply>.“

or  

#### **7.3.3 Electric Toys that are used with replaceable Batteries**

Additional user instructions in the operating manual – above all for coin batteries and button batteries.

## **7.5 Instructions for ride-on electric Toys**

Additional warning notes for electric ride-on toys according to EN 71-1:2014+A1:2018, point 7.10.3.

## **9.8 Abnormal Supply via a USB Connection**

For toys powered via a USB connection, the test shall be repeated according to point 9.3., whereas the toy is powered by a voltage of 42 V.

## **12 Mechanical Strength**

The mechanical test (spring hammer test) on the enclosure (battery cover), handles, levers, knobs and has been reduced to 3 impacts of 0.5J each.

### **13.4.1 Small Batteries**

Batteries which fit completely into the small parts cylinder acc. to EN 71-1:2014+A1:2018, point 8.2 shall not be removable without the aid of a tool. Therefore, AAA/LR03 - batteries are covered by this regulation now.

### **13.4.4 Electric Toys placed above a Child**

Electric toys powered by batteries, where the battery compartment is placed above a child, (e.g. music boxes), shall be tested for leaks from a volume of 100 mm<sup>3</sup>.

### **13.4.6. Battery Compartment Fasteners**

A screw of a battery compartment must not come loose at a force of 20 N (must be captive).

## **13.10 Speed Limitation of ride-on electric Toys**

The values of the maximum speed of electric ride-on toys for children under 3 years and over 3 years of age are laid down in EN 71-1: 2014 + A1: 2018, point 5.6 resp. 4.15.1.8.

## **15.5 Batteries**

Batteries included with electric toys shall comply with the following standards:

- IEC 60086 for primary batteries
- IEC 62133 for secondary batteries (rechargeable batteries)

Approval by certificates or by a partial test of the above-mentioned standards.

## **16.1 Fixings**

Screws and nuts <2.8 mm nominal diameter (external thread diameter) must withstand torque tests, if they are used for electrical connections or are likely to be tightened by the user.

## **19.2 Optical Radiation**

Electric toys incorporating lasers and/or light emitting diodes (LED) shall comply with Annex E (a new test procedure for LEDs has been introduced.)

## **Annex A - 7.3.4 Experimental Sets**

Experimental sets shall be marked by a warning, which in addition to the appropriate age of the users, also indicates the reasons for this age restriction and refers to instructions for care givers.

### **Timeline for implementation**

EN IEC 62115:2020 should be given the status of a national standard at the latest by 21 August 2020, and conflicting national standards shall be withdrawn at the latest by 21 February 2022.

The German version DIN EN IEC 62115 (VDE 0700-210):2021-04 will be published in April 2021.

The start of application of this standard is 01 April 2021, the transition period for the previously valid version DIN EN 62115 (VDE 0700-210):2016-06 runs until 02 December 2021.

With the next issue of the Official Journal of the European Union (OJEU), the citation of EN IEC 62115:2020 is expected. This will make it mandatory for presumption of conformity with the Toy Safety Directive 2009/48/EC (harmonization of the standard). After the end of the transitional period (probably on 02 December 2021), only the new version will be valid as the legal basis.

### **Further technical information:**

**TÜV Rheinland LGA Products GmbH**

**Technical Competence Center Toys**

Dr. Kathrin Birkmann

Tillystraße 2

D-90431 Nürnberg

Tel. 0911/655-5863

[Kathrin.Birkmann@de.tuv.com](mailto:Kathrin.Birkmann@de.tuv.com)

### **Disclaimer of Liability**

This newsletter covers information of general nature without concrete connection to specific natural or legal persons, objects or circumstances. This newsletter should not be considered a legal advisory and does in no case replace one. The TÜV Rheinland LGA Products GmbH (TRLPG) cannot guarantee that the wording conforms to the corresponding official version. The TRLPG puts every attempt into ensuring the correctness and actuality of the information provided; however, errors and ambiguities can never be completely excluded. Therefore, the TRLPG does not assume liability for the actuality, correctness, completeness or quality of the information provided. For the official text please reference the Official Journal of the European Union. Liability claims against the TRLPG, whether referring to material damage or goodwill that result from the use or non-use of the presented information or use of incorrect and incomplete information are principally excluded.