

QCVN 3:2009/BKHCN

NATIONAL TECHNICAL REGULATION ON SAFETY OF TOYS

PREAMBLE

QCVN 3:2009/BKHCN is formulated by the Committee for drafting of the National technical regulation on safety of toys, is presented by the Directorate for Standards, Metrology and Quality, and is promulgated under the Circular No. 18/2009/TT-BKHCN dated June 26, 2009 by the Minister of Science and Technology.

1. GENERAL

1.1. Scope

This Circular defines requirements for toys to abate hazards and risks against the safety and health of children, relevant testing methods and management of toys imported or produced domestically and in circulation.

Products listed in the Annex shall not be governed by this Regulation.

1.2. Regulated entities

This Regulation applies to organizations and individuals that manufacture, import, distribute and sell toys in retail. It also applies to state management authorities and relevant entities.

1.3. Terminology

In this Regulation, *child toy* is a product or material intended to be played with by children under 16 years of age.

2. TECHNICAL STIPULATION

2.1. Requirement for safety of toys

2.1.1. Mechanical and physical requirements

Mechanical and physical requirements are defined in TCVN 6238-1:2008 (ISO 8124-1:2000) *Safety of toys - Part 1: Safety aspects related to mechanical and physical properties*.

2.1.2. Requirement for flammability

Flammability requirement is defined in TCVN 6238-2:2008 (ISO 8124-2:2007) *Safety of toys - Part 2: Flammability*.

2.1.3. Chemical requirement

2.1.3. Migration of certain elements

2.1.3. Requirement for migration of certain elements is defined in TCVN 6238-3:2008 (ISO 8124-3:1997) *Safety of toys - Part 3: Migration of certain elements*.

2.1.3.2. Migration of hazardous organic compounds

2.1.3.2.1. Liquid in toys

The pH value of accessible liquid in toys must not be lower than 3.0 or greater than 10.0 when tested according to ISO 787-9. This requirement does not apply to the ink in writing instruments.

2.1.3.2.2. Formaldehyde in toys for children under 3 years of age

- Accessible textile components shall not contain free and hydrolyzed formaldehyde in excess of 30 mg/kg.
- Accessible paper components shall not contain formaldehyde in excess of 30 mg/kg.
- Accessible adhesive-bonded wood components shall not release formaldehyde in excess of 80 mg/kg.

2.1.3.2.3. Aromatic amines in toys

Aromatic amines (including derivatives of azo dyes in samples) in materials for toy production shall not exceed the limit in the following table:

Table - Aromatic amines

Compound	CAS number	Maximum limit (mg/kg)
Benzidine	92-87-5	5
2-Naphthylamine	91-59-8	5
4-Chloroaniline	106-47-8	5
3,3'-Dichlorobenzidine	91-94-1	5
3,3'-Dimethoxybenzidine	119-90-4	5
3,3'- Dimethylbenzidine	119-93-7	5
o-Toluidine	95-53-4	5
2-Methoxyaniline (o-Anisidine)	90-04-0	5
Aniline	62-53-3	5

This stipulation applies to materials for toy production and to toy components as follows:

Toys and toy components	Material
Toys or accessible toy components with a mass of 150 g or less intended to be played with in the hands by children under 3 years of age	Wood
	Paper
Toys or accessible components of toys intended for children under 3 years of age	Textile
	Leather
Mouthpiece components of mouth-actuated toys	Wood
	Paper
Toys worn over the mouth or nose	Textile
	Paper
Solid toy materials intended to leave a trace	All
Colored accessible liquids in toys	Liquid
Modelling clay, play clay and similar, except chemical toys addressed by TCVN 6238-5:1997 (EN 71-5:1993)	All
Balloon-making compounds	All
Imitation tattoos	All

2.1.3.2.4. Apart from the stipulations in point 2.1.3.2.1, point 2.1.3.2.2 and point 2.1.3.2.3 of this Regulation, toys must adhere to other migration limits of hazardous organic compounds addressed by relevant documents.

2.1.4. Requirement for electric toys

Apart from requirements in point 2.1.1, 2.1.2 and 2.1.3 of this Regulation, toys must not be powered by electricity of a nominal voltage exceeding 24 V. Furthermore, no part of toys may have a nominal or instantaneous voltage exceeding 24 V.

Parts of toys, which are connected to or come into contact with a source of electricity of a nominal voltage exceeding the said limit, and electrical wires and cables connected to such parts shall be properly insulated and protected as to prevent electrical hazards.

2.2. Labelling

Labelling of toys shall adhere to legal regulations on product labelling. Warnings defined in relevant regulations must be displayed on the label.

3. TESTING METHOD

3.1. Mechanical and physical testing

Mechanical and physical testing shall be subject to TCVN 6238-1:2008 (ISO 8124-1:2000) *Safety of toys - Part 1: Safety aspects related to mechanical and physical properties.*

3.2. Flammability testing

Testing of flammability shall be subject to TCVN 6238-2:2008 (ISO 8124-2:2007) *Safety of toys - Part 2: Flammability.*

3.3. Chemical testing

3.3.1. Hazardous elements

Testing of hazardous element migration shall be subject to TCVN 6238-3:2008 (ISO 8124-3:1997) *Safety of toys - Part 3: Migration of certain elements.*

3.3.2. Hazardous organic compounds

3.3.2.1. Liquid in toys

Testing of accessible liquid in toys shall be subject to ISO 787-9:1981 *General methods of test for pigments and extenders – Part 9: Determination of pH value of aqueous suspension.*

3.3.2.2. Formaldehyde in toys for children under 3 years of age

- Testing of accessible textile components of toys shall be subject to TCVN 7421-1:2004 (ISO 14184-1:1998) *Textiles - Determination of formaldehyde - Part 1: Free and hydrolyzed formaldehyde (water extraction method).*

- Testing of accessible components of toys shall be subject to EN 645 *Paper and board intended to come into contact with foodstuffs – Preparation of cold water extract* and EN 1541 *Paper and board intended to come into contact with foodstuffs – Determination of formaldehyde in an aqueous extract.*

- Testing of accessible adhesive-bonded wood components of toys shall be subject to EN 717-3 *Wood-based panels – Determination of formaldehyde release – Part 3: Formaldehyde release by the flask method.*

3.3.2.3. Aromatic amines in toy production materials

Determination of aromatic amines shall be subject to EN 71-10:2005 *Safety of toys – Part 10: Organic chemical compounds – Sample preparation and extraction* and EN 71-11:2005 *Safety of toys – Part 11: Organic chemical compounds – Methods of analysis.*

4. MANAGEMENT REGULATION

4.1. Domestically produced toys

4.1.1. Domestically produced toys must acquire declaration of conformity to part 2 of this Regulation on the basis of the result of conformity assessment(s) by an appointed certification body.

Conformity assessment shall occur by one of these methods:

- Method 1: representative sample testing;
- Method 5: representative sample testing and evaluation of manufacturing processes; supervision by testing of samples collected at the site of production or from the market and evaluation of manufacturing processes;
- Method 7: testing and evaluation of batches of goods.

4.1.2. Domestically produced toys, prior to being marketable, must bear the marking of conformity.

4.2. Imported toys

4.2.1 Imported toys must be certified to conform to part 2 of this Regulation. The conformity of imported toys shall be certified by domestic and foreign verification or certification bodies appointed (or recognized) by competent government authorities.

Certification of conformity shall occur by one of these methods:

- Manner 1: representative sample testing;
- Method 5: representative sample testing and evaluation of manufacturing processes; supervision by testing of samples collected at the site of production or from the market and evaluation of manufacturing processes;
- Method 7: testing and evaluation of batches of goods.

4.2.2. Imported toys, prior to being marketable, must bear the marking of conformity.

4.3. Toys in circulation

Toys in circulation must bear the marking of conformity and label as per the law.

4.4. Quality inspection

Toys produced domestically, imported or in circulation shall be subjected to quality inspection according to legal regulations on product quality.

4.5. Certification, declaration, marking and assessment of conformity

Certification, declaration, marking and assessment of conformity, as defined in point 4.1, 4.2 and 4.3 of this part shall be governed by the Regulation on certification and declaration of compliance and conformity under the Decision No. 24/2007/QĐ-BKHCN by the Minister of Science and Technology.

4.6. The appointment of certification bodies, testing bodies and verification bodies, as stated in 4.1.1 and 4.2.1, shall be governed by the Circular No. 09/2009/TT-BKHCN by the Minister of Science and Technology.

5. RESPONSIBILITIES OF ORGANIZATIONS AND INDIVIDUALS

5.1. Domestic toy producers must declare conformity to part 2 of this Regulation and maintain the quality of toys in conformity to the declaration. Furthermore, they shall carry out responsibilities according to Article 20 of the Regulation on certification and declaration of compliance and conformity under the Decision No. 24/2007/QĐ-BKHCN by the Minister of Science and Technology.

5.2. Toy importers must acquire certification of conformity and maintain the quality of toys according to part 2 of this Regulation.

5.3. Distributors and retail vendors shall only sell quality-assured toys that bear the marking of conformity and label in accordance with current regulations.

6. IMPLEMENTATION

6.1. Director for Standards, Metrology and Quality shall be responsible for cooperating with relevant authorities to provide guidelines and organize the implementation of this Regulation.

Director for Standards, Metrology and Quality, depending on needs of management, shall be responsible for recommending to the Ministry of Science and Technology the amendments to this Regulation.

6.2. If legislative documents and standards stated in this Regulation are amended or replaced, amendments and replacements shall prevail./.

ANNEX

LIST OF PRODUCTS THAT ARE NOT CONSIDERED AS TOYS

In this Regulation, the following products are not considered as toys:

- Bicycles, except for those considered to be toys, i.e. those having a maximum saddle height of 435 mm;
- Slingshots (i.e. catapults);
- Darts with metal points;
- Home and public playground equipment;
- Guns and pistols using pneumatic air or compressed gas;
- Kites, except for the electric resistance of their strings according to TCVN 6238-1:2008 (ISO 8124-1:2000);
- Model kits, e.g. aircraft or ship models, not intended to be played with;
- Sporting goods and equipment, camping goods, athletic equipment, musical and performance instruments; however, toys that simulate such equipment and instruments are governed by this regulation;

There is a diminutive distinction between sporting and musical instruments and simulation toys. The intention of the manufacturer or distributor, as well as normal or foreseeable use, determines whether the item is a simulation toy or not;

- Models of aircraft, rockets, boats and land vehicles powered by combustion engines. However, simulation toys are governed by this regulation.
- Collectible products not intended for children under 16 years of age;
- Holiday decorations for ornamental purposes;
- Equipment intended to be used in deep water, swimming-learning devices and flotation aids for children such as swim-seats and swim-aids;
- Toys installed in public places (e.g. arcades and shopping centers);
- Puzzles having more than 500 pieces or without a picture, for professional use;
- Fireworks including percussion caps, except percussion caps specifically designed for toys;
- Products containing heating elements intended for use under the supervision of an adult in a teaching context;
- Steam-powered vehicles;

- Audiovisual toys that can be connected to a video screen and operated at a nominal voltage greater than 24 V;
- Babies' pacifiers (dummies);
- Faithful simulation of firearms;
- Electric ovens, irons or other functional products operated at a nominal voltage greater than 24 V;
- Bows for archery with an overall relaxed length exceeding 120 cm;
- Fashion jewellery for children.