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TECHNICAL REGULATION OF THE CUSTOMS UNION

TP TC 008/2011

"On Safety of Toys"

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Foreword

1. This technical regulation of the Customs Union was developed in accordance with the Agreement on common principles and rules of technical regulation in the Republic of Belarus, the Republic of Kazakhstan and the Russian Federation of November 18, 2010.

2. This technical regulation of the Customs Union is developed in order to establish uniform requirements for toys mandatory for implementation and enforcement in the common customs territory, to ensure free movement of toys placed on the market in the common customs territory of the Customs Union.

3. If there are other technical regulations of the Customs Union, the Eurasian Economic Community (hereinafter - EurAsEC) adopted which establish requirements for toys, toys must comply with the requirements of these technical regulations of the Customs Union, EurAsEC covering these toys

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Article 1. **Scope**

1. This technical regulation of the Customs Union applies to toys placed on the market of the common customs territory of the Customs Union which were not previously in use.

2. This technical regulation of the Customs Union does not apply to items specified in Annex 1 to this technical regulation of the Customs Union which are not regarded as toys, as well as to custom-made toys, exhibition samples.

3. This technical regulation of the Customs Union sets requirements for toys with the aim of protecting the life and health of children and persons looking after them, as well as preventing actions misleading purchasers (consumers) of toys regarding their purpose and safety.

Article 2. **Definitions**

In this technical regulation of the Customs Union the following terms and their definitions are used:

inflammation - the emergence of combustion under the influence of an ignition source accompanied by flames;

flammability - potentiality of substances and materials for inflammation;

playing kit containing chemical substances (not related to chemistry experiment kits) – plaster cast production kit; ceramic materials and enamels for glass vitrification supplied in kits for the equipment of mini-workshops for artists; kits containing molding mixtures based on plasticized polyvinyl chloride (with subsequent heating in a furnace); kits for art casting; molding kits; photo developer kits; adhesives, paints, lacquers, thinners and cleaners (reducers) supplied in designer kits;

play set - a toy consisting of various items, materials, substances, intended to develop children's creativity and manual labor skills;

toy - an article or material intended for games of a child (children) under 14;

toy for games on the water - a toy (inflatable or non-inflatable) bearing a load of a child's body weight when swimming and (or) intended for games in shallow water;

printed board game - a game made with the use of the printing method, with or without additional game elements;

stuffed toy - a toy with or without a wireframe, with a soft surface and a filling material;

scale toy – a toy whose dimensions are determined in reduced scale in accordance with the actual dimensions of the prototype;

manufacturer - a legal or natural person as an individual entrepreneur engaged in production and sale of toys on their own behalf and responsible for their compliance with safety requirements of this technical regulation of the Customs Union;

importer - a resident of a Member state of the Customs Union which concluded a foreign trade agreement for the transfer of toys with a non-resident of a Member state of the Customs Union, implements sales of these toys, and is responsible for their compliance with safety requirements of this technical regulation of the Customs Union;

designer kit - a set of mechanical and (or) electrical (electronic) components designed for the assembly of various toys;

toy material - all the materials composing a toy;

placing a toy on the market - the processes of transfer of toys from the manufacturer to the purchaser (consumer) in the common customs territory of the Customs Union covering the processes a toy undergoes after its manufacture;

optical toy - a toy whose operation is based on the principles of geometrical optics;

user – a child using a toy according to jts intended purpose, as well as a person looking after them;

purchaser (consumer) - natural or legal person intending to purchase or purchasing a toy;

intended use - the use of toys in accordance with their purpose specified by the manufacturer on the toys and (or) in operational documents;

child – a person under 14 years old;

risk - a combination of probability of causing harm and consequences of such harm for life or health of a child and a person looking after him;

standard sample of a toy - a toy chosen from a group of similar toys designed for one age group (for children under 3 years, over 3 years and older) manufactured in accordance with a unified technical document, technological process, from the same materials for which the same safety requirements are specified;

person authorized by the manufacturer - a legal or natural person duly registered by the Customs Union Member state specified by the manufacturer under a contract with the aim of performing conformity assessment on his behalf and placing toys on the common customs territory of the Customs Union, as well as imposing liability for non-conformity of toys to requirements of the technical regulation of the Customs Union;

functional toy - a toy which is a reduced scale model of a product or device used by adults that simulates the purpose and performance of its functions;

chemical toy - a kit for chemical experiments by children consisting of one or several chemical substances and (or) reagents, supplied with or without the equipment;

electric toy - a toy at least one function of which is performed by means of electric power.

Article 3. **Market circulation procedures**

1. Toys are placed on the market under their compliance with this technical regulation of the Customs Union, as well as other technical regulations of the Customs Union, EurAsEC, covering these toys.

2. Toys the compliance of which with the requirements of this technical regulation of the Customs Union has not been confirmed shall not be labeled with a unified marking of conformity for products of the Customs Union Member states and shall not be allowed for placing on the market.

3. Toys which are not marked with the unified marking of conformity for products of the Customs Union Member states shall not be allowed for placing on the market.

Article 4. **Safety requirements**

1. Toys must be designed and manufactured in such a way that when used as directed they would present no hazard to life and health of children as well as persons looking after them and ensure the absence of risk:

inherent with the design of the toy;

inherent with the materials used;

related to the use of the toy which can not be eliminated when modifying the design of the toy without changing its functions and basic characteristics, replacing the material.

The risk of using toys must be correlated with the age peculiarities of children.

2. Materials

The materials composing toys shall be clean (with no dirt), uninfected, and shall meet this technical regulation as well as standards specified in subparagraph 1.2 of Article 5 of this technical regulation of the Customs Union.

In toys for children under 3 years of age the use of fur, leather, glass, porcelain, raised rubber, cardboard and paper, stuffing pellets measuring 3 mm or less without an inner case, fillings for toys such as rattles, whose size increases by more than 5% under humid conditions is not permitted.

In toys intended for children under 3 years of age migration of chemical substances of hazard class 1 is not permitted.

In toys the use of recycled materials derived from recycling used materials is prohibited. The use of own production waste for manufacturing toys is permitted.

Protective-decorative coating of toys must be suitable for wet treatment, interaction with saliva and sweat.

3. Toys must be designed and manufactured in such a way that when used as directed they would present no hazard to life and health of children, persons looking after them.

3.1 Organoleptic properties

Toys shall comply with requirements to organoleptic properties of hygienic safety specified in Annex 2 to this technical regulation of the Customs Union.

3.2. Physical and mechanical properties

A toy and its components, including fasteners, must withstand the mechanical loads resulting from the use of the toy according to its intended purpose, in addition it must not break and must retain its application properties.

Accessible edges, sharp ends, rigid parts, springs, fasteners, clearances, corners, protrusions, cords, ropes, and mountings of toys must eliminate the risk of causing injury to a child.

Leakage of liquid fillings in toys is not permitted.

Moving components of a toy must eliminate the risk of causing injury to children. Driver mechanisms must be out of reach for the child.

A toy and removable parts intended for use by children under 3 years old, as well as toys fixed directly on food products must have the size sufficient to avoid penetration into the upper airways.

A stuffed toy must not contain hard of sharp objects in the filling. Seams of a stuffed toy must be durable.

A toy contained in food products and (or) entering the retail market together with food products must have its own packaging. The size of such packaging must not cause a risk of suffocation of the child. Placing of a plastic toy without its own packaging on the outside of the food product package is permitted.

A toy and its components must eliminate the risk related to suffocation of the child.

Masks and helmets for games made of an impermeable material completely covering the child's head must be designed and manufactured in such a way that the risk of suffocation caused by insufficient ventilation is eliminated.

A toy intended to maintain the child's body on the surface of water must be designed and manufactured in a way to be leak-proof and durable.

A toy which can fit a child and presenting a confined space for him must have a hole for exit that can be easily opened from the inside and have a surface with ventilation holes.

A toy bearing the body weight of a child and intended for riding must be durable and stable (except for bicycles). Toys with a mechanical or electrical drive with a free-wheel mechanism or a transmission neutral position must have a brake mechanism. Toys bearing the weight of a child and intended for riding in which the motion to the wheel is transmitted directly by hand or foot of the child or through mechanical transmission, as well as electrically operated toys are allowed to produce without the brake mechanism. Toys with a chain belt must be equipped with protective shields. The bearing surfaces must have parts preventing slippage.

A toy bearing the weight of the child and not intended for riding must be durable and resistant to rollover.

A toy with a projectile released by the trigger mechanism, as well as projectiles which have kinetic energy must minimize the risk of causing injury to a child and (or) the persons looking after him.

In construction kits and assembly model kits for children under 10 years of age soldering is not allowed.

A toy containing heating elements must be manufactured in such a way to ensure the following:

the temperature of all surfaces available for contact must not lead to a burn on contact;

the intensity level of the integrated flux of infrared radiation must meet the hygienic safety requirements specified in Annex 2 to this technical regulation of the Customs Union;

liquids, vapours, or gases contained in a toy which, when released (if such a release is necessary for the operation of the toy), can cause burns or other injuries must not have increased temperature or pressure values.

The level of local vibration in toys which have a vibration source, the sound level in sound toys must meet the hygienic safety requirements specified in Annex 2 to this technical regulation of the Customs Union.

Surface painting, as well as painting of rattles and toys contacting with the mouth of the child is not allowed.

In printed board games the text and images must be distinct and hard on the main background. Scuffing on paper and cardboard is not allowed.

An optical toy must be designed and manufactured in a way to minimize the risks associated with the vision correction of the child.

Toys with LED's must not adversely affect the visual organs of the child, cause harmful emissions.

In toys the use of laser systems of all types is prohibited.

3.3. Flammability

Stuffed toys, costumes, and carnival toy products (such as beards, mustaches, wigs, masks, crowns), as well as toys which can hold a child must be fireproof.

A playing kit including chemical substances and not related to kits for chemical experiments must not contain flammable substances or reagents which can ignite when mixed, as well as form harmful vapours and gases.

A toy must not be explosive or contain components (substances, materials) which become explosive when using a toy.

A toy, including chemical toys, shall not contain any substances or reagents which:

are capable of forming explosive mixtures as the result of a reaction when heated, as well as when combined with oxidizers;

are capable of forming flammable or explosive vapour mixtures with air.

3.4. Chemical properties

When using the toy the risk of causing injury due to aspiration, contact of chemical substances with skin, mucous membranes, eyes, or stomach must be minimized.

The level of migration and emission of harmful chemical substances from toys must meet the hygienic safety requirements specified in Annex 2 to this technical regulation of the Customs Union.

In chemical toys and playing kits including chemical substances and not related to kits for chemical experiments the use of a certain number of substances or reagents is permitted if their content does not exceed the maximum number specified for each substance.

3.5 Toxicological and hygienic characteristics

Toxicological and hygienic characteristics of hygienic safety of toys must meet the requirements specified in Annex 2 to this technical regulation of the Customs Union.

3.6. Electrical properties

In an electric toy, as well as in any of its constituent parts, the nominal voltage must not exceed 24 V.

Toy components which contact or can contact the electric current source, as well as conducting cables, wires must be carefully insulated and mechanically protected in order to eliminate the risk of electric shock.

The density levels of electrostatic, electromagnetic and electric fields of radio-controlled, electronic and electric toys shall meet the hygienic safety requirements specified in Annex 2 to this technical regulation of the Customs Union.

The cords for flying toys must be non-metallic.

3.7. Radiation safety

Values of radiation safety of toys (specific effective activity of natural radionuclides) made from natural materials must meet the values specified in Annex 2 to this technical regulation of the Customs Union.

3.8. Microbiological characteristics

Microbiological characteristics of hygienic safety of toys must meet the requirements specified in Annex 2 to this technical regulation of the Customs Union.

4. Packaging

Packaging must be safe and eliminate the risk of suffocation of the child.

A toy must have an individual and (or) a multiple packaging.

If a packaging that comes with the toy is also intended for use, it is regarded as a toy component. The scope of packaging is specified by the manufacturer.

5. Marking

5.1. The marking of toys must be accurate, verified, distinct, easy-to-read, easy to reach for examination and identification.

5.2. Marking is applied by the manufacturer (person authorized by the manufacturer) and the importer.

The place and method of marking is specified by the manufacturer (person authorized by the manufacturer) and the importer.

5.3. Marking must contain the following information:

- name of the toy;
- country of origin;
- name and location of the manufacturer (person authorized by the manufacturer), the importer, their contact information;
- trade mark of the manufacturer (if any);
- minimal age of the child for which the toy is intended or an icon indicating the age of the child;
- main construction material (for children under 3 years of age).
- methods of care of the toy (if needed);
- manufacture date (month, year);
- service life or working life (when established);
- storage conditions (if necessary).

5.4. Depending on the type of toy the contents of the marking can include: completeness (for kits), service instruction of the toy, methods of hygienic treatment, safety measures for the use of toy, warning signs, assembly instruction.

Warning information must give reference to special precautionary measures for use in accordance with Annex 3 of this technical regulation of the Customs Union.

6. The marking and technical documentation accompanying the toy are provided in Russian or in the Russian and state language(s) of the Customs Union Member States if there are such requirements in the legislation(s) of the Custom Union Member state(s).

Article 5**. Ensuring compliance with safety requirements**

1. Compliance of toys with this technical regulation of the Customs Union is ensured by meeting:

1.1 the hygienic safety requirements of this technical regulation of the Customs Union specified in Annex 2 to this technical regulation of the Customs Union.

1.2 safety requirements of this technical regulation of the Customs Union (with the exception of those given in subparagraph 1.1 of this paragraph) directly or by meeting the requirements of standards included in the List of standards voluntary application of which ensures compliance with the requirements of the technical regulation of the Customs Union.

2. Research (test) methods of toys are established in the standards included in the List of standards, which contain rules and research (test) and measurement methods, among others the rules of sampling required for implementation and enforcement of the requirements of the technical regulation of the Customs Union and assessment (confirmation) of conformity of products.

Article 6. **Conformity assessment**

1. Prior to placing on the market toys are subject to the procedure of conformity assessment to safety requirements of this technical regulation of the Customs.

2. Conformity assessment of toys is carried out by means of certification.

Certification is performed by a certification (assessment (confirmation) of conformity) body listed in the Unified Register of certification bodies and testing laboratories (centres) of the Customs Union (hereinafter - the certification body) under certification schemes 1c, 2c, 3c, in accordance with the Provision on the application procedure of standard schemes of assessment (confirmation) of conformity in the technical regulations of the Customs Union approved by the Customs Union Commission (hereinafter – the Commission).

Certification tests are conducted by an accredited testing laboratory (centre) listed in the

Unified Register of certification bodies and testing laboratories (centres) of the Customs Union (hereinafter - the accredited testing laboratory (centre)).

In case of non-application of the standards specified in subparagraph 1.2 of Article 5 of this technical regulation of the Customs Union or if they are unavailable conformity assessment of toys is carried out in the form of certification (schemes 1c, 2c, 3c) if accordance with paragraph 5 of this Article.

3. Certification of serially produced toys is carried out under schemes 1c, 2c. Sampling of toys for certification is carried out by the certification body or its authorised persons.

Certification of a batch of toys is carried out under scheme 3c. A batch of toys manufactured in the common customs territory of the Customs Union is presented by the manufacturer, a batch of toys imported into the common customs territory of the Customs Union is presented by the importer or person authorised by the manufacturer. Sampling of toys for certification is carried out by the certification body or its authorised persons.

4. When certifying toys (schemes 1c, 2c, 3c):

4.1. the manufacturer (the person authorised by the manufacturer), the importer submits to a certification body a set of documents confirming the compliance of toys with safety requirements of this technical regulation of the Customs Union which includes:

the document allowing the manufacture of the toy (schemes 1c, 2c);

a color image of the standard sample(s) of the toy;

copies of the design documentation or technical specification of the standard sample(s) of the toy;

information on raw products, materials and components, information on their manufacturers and importers (schemes 1c, 2c);

operational documents (if available);

list of standards to be met by the toys from the List of standards specified in subparagraph 1.2 of Article 5 of this technical regulation of the Customs Union (when used by the manufacturer);

certificate of compliance for management system of toy production (scheme 2c);

contract (supply contract) or shipping documentation (for a batch of toys) (scheme 3c);

4.2. certification body shall:

4.2.1. identify toys;

4.2.2. organize testing of a sample (samples) of toys for compliance with requirements of standards from the List of standards specified in subparagraph 1.2 of Article 5 of this technical regulation of the Customs Union and shall analyze test report(s).

4.2.3. evaluate production (scheme 1c).

4.2.4. issue a certificate of compliance in accordance with the common form approved by the Commission.

The certificate of compliance for serially produced toys shall be valid for no more than 5 years, the validity of the certificate of compliance for a batch of toys shall not be set up;

4.3. The manufacturer (the person authorized by the manufacturer), the importer shall:

4.3.1. apply unified marking of conformity of products on the market of the Customs Union;

4.3.2. collect a set of documents for toys which includes:

the documents specified in subparagraph 4.1 of this paragraph;

test report(s);

results of the evaluation of production (scheme 1c);

the certificate of compliance.

4.4. certification body shall:

perform inspection control over certified toys by means of:

testing samples in an accredited testing laboratory (centre) and (or) evaluation of production (scheme 1c);

testing samples in an accredited testing laboratory (centre) and analyzing the results of inspection control by a certification body for management system over certified management system of toy production (scheme 2c).

5. When certifying toys in case of non-application of the standards from the List of standards specified in subparagraph 1.2 of Article 5 of this technical regulation of the Customs Union, or in their absence (schemes 1c, 2c, 3c):

5.1. the manufacturer (the person authorised by the manufacturer), the importer submits to a certification body a set of documents confirming the compliance of toys with safety requirements of this technical regulation of the Customs Union which includes:

the document allowing the manufacture of the toy (schemes 1c, 2c);

a color image of the standard sample(s) of the toy;

copies of the design documentation or technical specification of the standard sample(s) of the toy;

operational documents (if available);

information on raw products, materials and components, information on their manufacturers and importers (schemes 1c, 2c);

description of adopted technical solutions and risk assessment confirming fulfillment of safety requirements of this technical regulation of the Customs Union;

certificate of compliance for management system of toy production (scheme 2c);

contract (supply contract) or shipping documentation (for a batch of toys) (scheme 3c);

5.2. certification body shall:

5.2.1. identify toys;

5.2.2. certify toys directly for safety requirements of this technical regulation of the Customs Union.

At the same time the certification body shall:

determine specific safety requirements for certified toys on the basis of the safety requirements of this technical regulation of the Customs Union;

analyze the adopted technical solutions and risk assessment performed by the manufacturer confirming the fulfillment of safety requirements of this technical regulation of the Customs Union;

determine the standards establishing research (test) methods from the List of standards referred to in paragraph 2 of Article 5 of this technical regulation of the Customs Union or in their absence determine the control, measurement and test procedures for confirmation of conformity of toys with specific safety requirements;

arrange tests of toys and analyze test report(s);

5.2.3. evaluate the production (scheme 1c);

5.2.4. issue a certificate of compliance under a single form approved by the Commission.

The certificate of compliance for serially produced toys shall be valid for no more than 5 years, the validity of the certificate of compliance for a batch of toys shall not be set up;

5.3. the manufacturer (the person authorized by the manufacturer), the importer shall:

5.3.1. apply unified marking of conformity of products on the market of the Customs Union;

5.3.2. collect a set of documents for toys upon completion of conformity assessment which includes:

the documents specified in subparagraph 5.1 of this paragraph;

test report(s);

results of the evaluation of production (scheme 1c);

the certificate of compliance.

5.4. certification body shall perform inspection control over certified toys by means of:

testing samples in an accredited testing laboratory (centre) and (or) evaluation of production (scheme 1c);

testing samples in an accredited testing laboratory (centre) and analyzing the results of inspection control by a certification body for management system over certified management system of toy production (scheme 2c).

6. A set of documents for toys shall be stored in the territory of the Customs Union Member states:

for toys - at the manufacturer (the person authorized by the manufacturer) within no less than 10 years from the date of phaseout (termination of production) of toys;

for a batch of toys - at the importer within no less than 10 years from the date of sale of the last item from the batch.

Article 7. **Unified marking of conformity of products on the market of the Customs Union Member states**

1. Toys complying with safety requirements of this technical regulation of the Customs Union which were subject to the conformity assessment procedure in accordance with Article 6 of this technical regulation of the Customs Union shall bear unified marking of conformity of products on the market of the Customs Union Member states.

2. Unified marking of conformity of products on the market of the Customs Union Member states shall be applied prior to placing of toys on the market.

3. Unified marking of conformity on the market of the Customs Union Member states shall be applied directly on the toy and (or) packaging of the toy (individual, multiple, transport) and (or) the label, medallion, tag (including sewn-in tags), package inserts, and is provided in enclosed operational documents.

Unified marking of conformity of products on the market of the Customs Union Member states shall be applied by any means which ensures distinct and clear image throughout the entire service life of the toy.

For toys consisting of several components the unified marking of conformity of products on the market of the Customs Union Member states shall be applied on those components which can be placed on the market separately.

4. Toys shall be marked with the unified marking of conformity of products on the market of the Customs Union Member states upon their compliance with the requirements of all technical regulations of the Customs Union, EurAsEC which are applied to them and which provide for affixing such a mark.

Article 8. **Safeguard clause**

The Customs Union Member states shall be liable to take all measures in order to prohibit placing of toys on the market of the common customs territory of the Customs Union, as well as to withdraw from the market the toys non-complying with safety requirements of this technical regulation of the Customs Union.

Annex 1
to technical regulation
of the Customs Union
"On Safety of Toys"
(TPTC 008/2011)

LIST
of items not regarded as toys and
not covered by technical regulation
"On Safety of Toys" of the Customs Union
(TP TC 008/2011)

1. Christmas-tree decorations, artificial Christmas-trees and their accessories, Christmas lights.
2. Scale models for collecting not suitable for children under 14 years old.
3. Equipment for children's playgrounds.
4. Sports equipment, including underwater.
5. Folk and decorative dolls not intended for children under 14 years old.
6. "Professional" toys located in public spaces for general use.
7. Playing slot-machines.
8. Puzzles containing more than 500 details.
9. Air guns.
10. Catapults and throwers.
11. Projectiles with metal tips.
12. Transformers for power-supplied toys, chargers for rechargeable batteries, including those supplied with the toy.
13. Items containing heating elements and intended for use in educational processes under the supervision of adults.
14. Vehicles intended for children under 14 years of age with internal combustion engines.
15. Toy cars with steam engines.
16. Bicycles intended for transportation on roads of general use.
17. Toys and games functioning at a nominal voltage of over 24 V.
18. Fire-arms replicas.
19. Imitation jewellery for children.
20. Swimming equipment (e.g., inflatable arm floats).
21. Protective means (goggles, sunglasses, bicycle helmets, skateboarding helmets).
22. Flying toys launched by the child by means of a rubber cord.
23. Bows the length of which exceeds 1200 mm when loosed.
24. Sanitary items made of latex, rubber and silicone elastomers for children.

Annex 2
to technical regulation
of the Customs Union
"On Safety of Toys"
(TP TC 008/2011)

Requirements to hygienic
safety of toys in accordance with
technical regulation "On Safety of
Toys" of the Customs Union
(TP TC 008/2011)

1. Requirements to hygienic safety of toys include:

Organoleptic quality (odor, smack);

Physical factors (sound level, level of electrostatic field strength, level of electromagnetic field strength of a radio-frequency range, level of electric field strength, intensity level of the integrated flux of infra-red radiation, level of local vibration, specific effective activity of natural radionuclides);

Sanitary-chemical characteristics (migration of harmful chemical substances into model environments, the list of which is determined depending on a chemical composition of the material and emission norms of harmful chemical substances from toys);

Toxicological-hygienic characteristics (irritant effect on mucous membranes, toxicity index);

Microbiological characteristics.

2. Organoleptic properties

2.1. The odor intensity of a toy under natural conditions and in aqueous extract shall not exceed 1 point for toys intended for children under 1 year old, 2 points for children over 1 year old.

The odor intensity of a sample and of aqueous extract of toys for children over 3 years old shall not exceed 2 points.

2.2. Toys intended for children under 3 years old as well as toys contacting the mouth cavity shall not have the smack intensity of more than 1 point.

3. Physical factors

3.1. Sound toys shall meet the following requirements:

The equivalent sound level of toys, with the exception of toys-models for sports, shall amount to:

For children under 3 years old - no more than 60 dBA;

For children from 3 to 6 years old - no more than 65 dBA;

For children over 6 years old - no more than 70 dBA.

The equivalent sound level of toys for outdoor games, with the exception of toys emitting sonic impulses, shall not exceed 75 dBA.

Maximum sound level of toys shall amount to:

For children under 3 years old - no more than 70 dBA;

For children from 3 to 6 years old - no more than 75 dBA;

For children over 6 years old - no more than 80 dBA.

The maximum sound level of toys for outdoor games shall not exceed 85 dBA.

The maximum sound level of toys emitting sonic impulses shall not exceed 90 dBA.

3.2. The level of electrostatic field strength on the surface of toys shall not exceed 15 kV/m.

3.3. The level of electromagnetic field strength radiated by radio-controlled, electronic, and electric toys shall not exceed 25 V/m at the range of frequencies of 0.3 - 300 kHz, 15 V/m at the range of frequencies 0.3 - 3 MHz, 10 V/m at the range of frequencies 3 - 30 MHz, 3 V/m at the range of frequencies 30 - 300 MHz, 10 mcW/cm2 at the range of frequencies 0.3 - 300 GHz.

3.4. The level of electric field strength of power frequency (50 Hz) produced by the toy shall not exceed 0.5 kV/m.

3.5. The intensity level of the integrated flux of infrared radiation shall not exceed 100 W/m2.

3.6. The levels of local vibration in toys having a vibration source shall not exceed 63 dB at the geometric mean frequency of octave bands of 8 Hz and 16 Hz, 69 dB - at 31.5 Hz, 75 dB - at 63 Hz, 81 dB - at 125 Hz, 87 dB - at 250 Hz, 93 dB - at 500 Hz, 99 dB - at 1000 Hz. The corrected level of vibration acceleration shall not exceed 66 dB.

3.7. Specific effective activity of natural radionuclides in natural materials and articles

manufactured from them which are parts of playing kits, artistic kits for children shall not exceed 370 Bq/kg.

4. Sanitary-chemical characteristics

4.1. The level of migration into the model environment (water, air) of harmful chemical substances from toys shall not exceed rates provided in Table 1.

Table 1

Sanitary-chemical characteristics for toys

Name of materials, articles	Name of detectable harmful substance	Migration level	
		Water environment (mg/dm_3), no more than	Air (mg/m_3), no more than
Cyanoethylene-styrenebutadiene plastics	α-methylstyrene	0.1	0.04
	cyanoethylene	0.02	0.03
	amagol	0.003	0.04
	benzene	0.01	0.1
	dimethylbenzenes (a mixture of isomerides)	0.05	0.2
	styrene	0.01	0.002
	toluene	0.5	0.6
	ethyl benzene	0.01	0.02
Polystyrene and styrene copolymers	cyanoethylene	0.02	0.03
	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	amagol	0.003	0.04
	benzene	0.01	0.1
	butadiene	0.05	1.0
	dimethylbenzenes (a mixture of isomerides)	0.05	0.2
	cumene (isopropylbenzene)	0.1	0.014
	methylmethacrylate	0.25	0.01
	butyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5
	styrene	0.01	0.002
	toluene	0.5	0.6
	formaldehyde	0.1	0.003*
	ethyl benzene	0.01	0.02
Materials on the basis of polyolefinels	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	hexane	0.1	-
	1-hexene	-	0.085
	heptane	0.1	-
	heptene	-	0.065
	isopropyl alcohol	0.1	0.6
	butyl alcohol	0.5	0.1
	isobutyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5

Name of materials, articles	Name of detectable harmful substance	Migration level	
		Water environment (mg/dm3), no more than	Air (mg/m3), no more than
	propyl alcohol	0.1	0.3
	formaldehyde	0.1	0.003*
	ethyl acetate	0.1	0.1
Polymerides on the basis of vinyl acetate	aldehyde	0.2	0.01
	vinyl acetate	0.2	0.15
	hexane	0.1	-
	heptane	0.1	-
	formaldehyde	0.1	0.003*
polyvinyl chlorides	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	benzene	0.01	0.1
	vinyl chloride	0.01	0.01
	dibutyl phthalate**	not allowed	not allowed
	dimethyl phthalate	0.3	0.007
	dioctylphthalate	2.0	0.02
	diethyl phthalate	3.0	0.01
	butyl alcohol	0.5	0.1
	isobutyl alcohol	0.5	0.1
	isopropyl alcohol	0.1	0.6
	methyl alcohol	0.2	0.5
	propyl alcohol	0.1	0.3
	toluene	0.5	0.6
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	zinc	1.0	-
	stannum	2.0	-
Isocyanate plastics	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	benzene	0.01	0.1
	butyl acetate	0.1	0.1
	isopropyl alcohol	0.1	0.6
	methyl alcohol	0.2	0.5
	propyl alcohol	0.1	0.3
	toluene	0.5	0.6
	formaldehyde	0.1	0.003*
	ethyl acetate	0.1	0.1
	ethylene glycol	1.0	1.0
Polyamide plastics	benzene	0.01	0.1
	hexamethylene diamine	0.01	0.001

Name of materials, articles	Name of detectable harmful substance	Migration level	
		Water environment (mg/dm^3), no more than	Air (mg/m^3), no more than
	e-ketohexamethylenifnine	0.5	0.06
	methyl alcohol	0.2	0.5
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
Acrylic plastic	cyanoethylene	0.02	0.03
	hexane	0.1	-
	heptane	0.1	-
	methylmethacrylate	0.25	0.01
Materials on the basis of polyester plastics	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	methyl acetate	0.1	0.07
	methyl alcohol	0.2	0.5
	propyl alcohol	0.1	0.3
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	formaldehyde	0.1	0.003*
Polyethylene-terephthalate and copolymers on the basis of terephthalic acid	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	dimethyl terephthalate	1.5	0.01
	butyl alcohol	0.5	0.1
	isobutyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5
	formaldehyde	0.1	0.003*
	ethylene glycol	1.0	1.0
Polycarbonate	diphenylolpropane	0.01	0.04
	methylene chloride	7.5	-
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	benzene chloride	0.02	0.1
Phenolic plastics and aminoplastics	aldehyde	0.2	0.01
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	formaldehyde	0.1	0.003*
Polymeric materials on the basis on epoxide resin	aldehyde	0.2	0.01
	phenol***	0.05	0.003
	total number of phenols***	0.1	-

Name of materials, articles	Name of detectable harmful substance	Migration level	
		Water environment (mg/dm3), no more than	Air (mg/m3), no more than
	formaldehyde	0.1	0.003*
	chloromethyl oxirane	0.1	0.2
Paraffins and waxes	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	benzapyrene**	not allowed	not allowed
	hexane	0.1	-
	heptane	0.1	-
	butyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5
	toluene	0.5	0.6
	formaldehyde	0.1	0.003*
Rubber-latex compositions	agidol 2	2.0	-
	agidol 40	1.0	-
	cyanoethylene	0.02	0.03
	altax	0.4	-
	acetyl benzene	0.1	0.003
	benzapyrene**	not allowed	not allowed
	vulcacite (zinc carbamilic ether)	1.0	-
	zinc dimethyl dithiocarbamate	0.6	-
	zinc diethyl dithiocarbamate	0.5	-
	dimethyl phthalate	0.3	0.007
	dibutyl phthalate**	not allowed	not allowed
	dioctylphthalate	2.0	0.02
	diethyl phthalate	3.0	0.01
	diphenylguanidine	0.5	-
	captax (2-mercaptobenzothiazole)	0.4	-
	styrene (vinyl benzene)	0.01	0.002
	sulfenamide Z (cyclohexyl-2-benzothiazole sulfenimide)	0.4	-
	thiuram D (tetramethylthiuram disulfide)	0.5	-
	thiuram E (tetraethylthiuram disulfide)	0.5	-
	zinc	1.0	-
Silicone plastics	aldehyde	0.2	0.01
	benzene	0.01	0.1

Name of materials, articles	Name of detectable harmful substance	Migration level	
		Water environment (mg/dm3), no more than	Air (mg/m3), no more than
	butyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	formaldehyde	0.1	0.003*
Paper, cardboard	aldehyde	0.2	0.01
	dimethyl ketone	0.1	0.35
	benzene	0.01	0.1
	butyl acetate	0.1	0.1
	dimethylbenzenes (a mixture of isomerides)	0.05	0.2
	butyl alcohol	0.5	0.1
	isobutyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5
	isopropyl alcohol	0.1	0.6
	toluene	0.5	0.6
	formaldehyde	0.1	0.003*
	ethyl acetate	0.1	0.1
	zinc	1.0	-
Timber	aldehyde	0.2	0.01
	butyl alcohol	0.5	0.1
	isobutyl alcohol	0.5	0.1
	methyl alcohol	0.2	0.5
	isopropyl alcohol	0.1	0.6
	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	formaldehyde	0.1	0.003*
Ceramics, glassworks	aluminium	0.5	-
	barium	0.5	-
	zinc	1.0	-
	titanium	0.1	-
Artificial fur and textiles	cyanoethylene	0.02	0.03
	dimethyl ketone	0.1	0.35
	benzene	0.01	0.1
	vinyl acetate	0.2	0.15
	methyl alcohol	0.2	0.5
	toluene	0.5	0.6
	phenol***	0.05	0.003
	total number of phenols***	0.1	-

Name of materials, articles	Name of detectable harmful substance	Migration level	
		Water environment (mg/dm3), no more than	Air (mg/m3), no more than
	formaldehyde	50 mcg/g	0.003*
Paints, pencils, soft-tip pens, gouache paints, plasticine, and other similar articles	phenol***	0.05	0.003
	total number of phenols***	0.1	-
	formaldehyde	0.1	0.003*
Steel	iron	0.3	-
	manganese	0.1	-
	chromium (Cr 3+)	total	-
	chromium (Cr 6+)	0.100	-
	nickel	0.1	-
	copper	1.0	-
Tin bronze	copper	1.0	
	zinc	1.0	
	nickel	0.1	
	tin	2.0	
	lead	0.03	
Aluminum alloys	aluminum	0.5	
	manganese	0.1	
	iron	0.3	
	copper	1.0	
	zinc	1.0	
Lead-silver alloys	lead	0.03	
	cadmium	0.001	
	silver	0.05	

* Rate provided without taking into account of environment air pollution.

** Not allowed in quantities exceeding the values corresponding to the lower limit of detection of the indicated harmful substances according to the measurement methods allowed to use for control of sanitary-chemical values.

*** Values are interchangeable

Note

1. Distilled water is a mandatory model environment during sanitary-chemical research.

2. From stuffed and wooden toys for children over 3 years old, clothing for dolls, toys, large toys intended to transport the child and holding or bearing the child the migration of harmful chemical substances is determined in the air model environment.

4.2. Emission of harmful chemical substances into the model environment (hydrochloric acid) contained in 1 kg of any toy materials with the exception of molding masses and paints applied by fingers shall not exceed the following rates:

Antimony - 60 mg; Chrome - 60 mg;
Lead - 90 mg; Arsenic - 25 mg;
Mercury - 60 mg; Barium - 1000 mg;
Cadmium - 75 mg; Selenium - 500 mg.

4.3. Emission of harmful chemical substances into the model environment (hydrochloric acid) contained in 1 kg of molding masses and paints applied by fingers shall not exceed the following rates:

Antimony - 60 mg; Chrome - 25 mg;
Arsenic - 25 mg; Lead - 90 mg;
Barium - 250 mg; Mercury - 25 mg;
Cadmium - 50 mg; Selenium - 500 mg.

5. Toxicological-hygienic characteristics.

5.1. Toys intended for children under 3 years of age as well as toys contacting the mouth cavity of the child according to their function must not produce irritant effect on mucous membranes.

5.2 Toys must not have local skin-irritant effect or the toxicity index of toys determined in water environment (distilled water) must range from 70 to 120% inclusive, in the air medium - from 80 to 120% inclusive.

6. Microbiological characteristics.

6.1. Microbiological characteristics of toys must meet the values given in table 2.

Table 2

Microbiological characteristics of toys

Name of the toy	Total number of microorganisms (mesophiles, aerobes, and facultative anaerobes), CFC*	Yeast, yeast-like fungi, in 1 g (1 cm_2, 1 cm_3) of toys	Bacteria from enterobacterium family, in 1 g (1 cm_2, 1 cm_3) of toys	Pathogenic staphylococci, in 1 g (1 cm_2, 1 cm_3) of toys	Pseudomonas aeruginosa, in 1 g (1 cm_2, 1 cm_3) of toys
Toys with fillings for children under 1 year old, molding masses and paints applied by fingers	no more than 10^2	none	none	none	none

Requirements to information on hazards and measures taken when using toys which pose the highest priority hazard, according to technical regulation "On Safety of Toys" of the Customs Union (TP TC 008/2011)

A toy posing the highest priority hazard for children and (or) persons looking after them regarding hazards shall be accompanied by information on hazards and measures taken when using the toy:

1. Toys not intended for children under 3 years of age must bear a pictorial symbol with the warning indication of an age group. The pictorial symbol is given in picture 1.

Picture 1

The elements of the pictorial symbol shall be implemented:

– The circle and cross-line - in red or black color;

– The circle background - in white color;

– The age group for which the toy is not intended, as well as the face outline - in black color.

The minimal diameter of a pictorial symbol shall be no less than 10 mm.

2. Operational documents for swings, slides, rings, swing bars, ropes and toys of similar purpose which have a crossbeam must contain requirements to mounting with the indication of components which can pose a hazard resulting from incorrect assembly and maintenance.

3. A functional toy or its packaging must bear the warning sign "Attention! Must be used only under direct supervision of adults."

Operational documents must contain precautionary measures and instructions according to which the users of the toy are exposed to risk in case of failure of taking such measures.

Operational documents must contain instructions on keeping toys in a place inaccessible by children.

4. A chemical toy must have operational documents which specify hazardous substances and reagents, instructions regarding the risks of their use and necessary precautionary measures to be taken. Operational documents must contain information regarding first aid treatment, as well as indication of the age group.

The packaging of a chemical toy must bear the sign "Attention! Only for children of over ... year old! Must be used only under direct supervision of adults!." The age is specified by the manufacturer.

5. The packaging of the food product containing a toy must bear the warning sign "Contains a toy."

6. When selling as toys roller skates and skateboards must be accompanied by the warning sign "Attention! Protective means recommended!"

Using of such toys implies demonstration of certain skills. Operational document should provide instructions in exercising caution when using a toy in order to prevent traumatizing caused by falling or collision, as well as instructions to use protective means (safety helmets, gloves, knee-pads, elbow-pads, etc.).

7. Toys for games on the water must be accompanied by the sign "Attention! Must be used in shallow water only under the supervision of adults!"