

ABOUT THE REPORT

Safer Chemicals Alternative (ALHem) presents a new study on banned and restricted phthalates in toys and childcare articles with the aim at raising public awareness on toy health safety in Serbia. The study is a part of "CRY-GAME" outreach campaign supported by IPEN Programme on Chemicals in Products "Raising Awareness on Health Impact of the Chemicals Used in Children Toys and Childcare products".

Samples were purchased in specialised toy stores and in stores selling toys from Asian countries. In addition, the Report includes analysis of information available on product labels to highlight the importance of reading the label to ensure toys are in compliance with the relevant legislation and are safe for human health.

T The goal of the campaign is to focus public attention on toxic chemicals in plastic toys, with a particular emphasis on phthalates, and their threat to the health of children due to child's typical mouth to hands behaviour and regular contact with such toys. Phthalates are endocrine disrupting substances proved to have harmful effects on fertility and foetus. Content of phthalates in 15 samples of children's toys and childcare articles was tested in November 2018 - January 2019.

ALHem - Safer Chemicals Alternative is a civil society organisation advocating for safe chemicals management in Serbia, and is active at all social levels with the aim of reducing chemical risks to human health and environment.

Campaign "CRY-GAME" was supported by international network IPEN which advocates for the future without toxic chemicals https://ipen.org/

Belgrade, March 2019





EXECUTIVE SUMMARY

Safer Chemicals Alternative (ALHem) conducted analysis of the presence of banned or restricted phthalates in toys and childcare articles with the aim at raising public awareness on toy health safety in Serbia. The study is a part of "CRY-GAME" outreach campaign supported by IPEN Programme on Chemicals in Products "Raising Awareness on Health Impact of the Chemicals Used in Children Toys and Childcare products".

The current study is part of ALHem's activities focused on monitoring of hazardous chemicals in consumer products available on the market of the Republic of Serbia with the aim to provide input to the implementation of the national legislation governing consumer safety for hazardous chemicals in products.

The goal of the campaign is to focus public attention on toxic chemicals in plastic toys, with a particular emphasis on phthalates, and their threat to the health of children due to their typical mouth to hands behaviour and regular contact with such toys. We highlight the importance of reading information on the product labels to ensure compliance with the national regulations and consumers' right to chose products which are safe for health.

This study asked whether phthalates restricted by the national legislation in Serbia could be found in children's toys and childcare articles in concentrations that violate the law. Products for testing were purchased in stores selling goods from

Asian countries and in specialized toys stores in Serbia. Laboratory analysis were carried out in November 2018 - January 2019.

Although there is a regulation in place that bans or restricts certain phthalates in toys, it is not properly enforced. According to the Serbian Rulebook on restrictions and bans of production, placement on the market and use of chemicals, six classified phthalates are restricted in all toys and childcare articles with the limit of 0.1% by weight, including Di-(2-ethylhexyl) phthalates - DEHP. However despite sanitary control of imported toys at the border, chemically unsafe toys are still broadly available on the market. Our study found DEHP in 46.6 % of toy and baby care product samples tested with concentrations ranging from 0.5 to 31.5 %.

In addition, analysis of information available on product labels showed that only 30% of toy samples met the requirements of the new draft Law on Consumer Goods. These products were purchased in specialised stores selling toys of well-known producers with registered trademarks.

Although all toys tested in the frame of the project contained CE mark on their labels or packages, more than 50% of samples contained high levels of phthalates which violated the EU regulations and the national legislation of Serbia. Placing the CE mark on the product should guarantee that a product meets conformance requirements specified in EU standards and legislation.

However, our project confirmed that the CE mark on the products purchased in Serbia does not guarantee product safety for consumers which jeopardise consumers' right to know and access to information they need to make the right choice.

Product manufacturers, importers, distributors and traders, as well as competent authorities are fully responsible for the safety of children's products that are put on the market in Serbia. They should work in close collaboration with other stakeholders, including scientific institutions, health and environmental networks, networks of Institutes for Public Health in Serbia, consumers' associations and other civil society organisations. Such collaboration will help to ensure product safety and public right to know about chemicals in products for children.

While the Republic of Serbia should fully harmonise its toy safety regulations with the EU Toy Safety Directive (2009/48/EC), the enforcement of the national regulations is nor less important to ensure toys sold in Serbia are safe for children.

We call upon all companies involved in toys manufacturing and trade in Serbia to comply with the national product safety requirements. We call upon the Ministry of Health to speed up the approval of the legal framework that is in compliance with EU Toys Safety Directive (2009/48/EC), to intensify the enforcement, adopt and implement monitoring programme, which would contribute to the protection of the health of our children and all people in Serbia.

CONTENT

1.	INTRODUCTION	1
2.	PHTALATES – SUBSTANCES OF HIGH CONCERN DUE TO THEIR EFFECTS ON	3
	HUMAN HEALTH	
	IMPACT OF PHTALATES TO CHILDREN'S HEALTH	4
	PRESENCE OF PHTHALATES IN TOYS IN THE EUROPEAN UNION	5
	RAPID ALERT SYSTEM FOR NON-FOOD CONSUMER PRODUCTS IN THE EU	6
	(RAPEX)	
	PRESENCE OF PHTHALATES IN TOYS IN THE REPUBLIC OF SERBIA	7
	NEPRO SYSTEM OF THE REPUBLIC OF SERBIA	8
3.	REGULATORY AND STRATEGIC FRAMEWORK	9
	PHTHALATES	10
	CHILDREN'S TOYS	13
	VIEW TO SAICM PROGRAMME ON CHEMICALS IN PRODUCTS AND LINK WITH	16
	CORRESPONDING SDG'S GOALS	
4.	CAMPAIGN CRY-GAME	19
	RESULTS OF LABORATORY TESTING AND CONCLUSIONS	21
	ANALYSIS OF CONTENT OF THE LABEL ON TESTED TOYS AND CONSLUSIONS	23
5.	RECOMMENDATIONS	26
6.	REFERENCES	29
	ANNEX	30

1

INTRODUCTION

AlHem's presents the results of the new study carried out with support from IPEN's Chemicals in Products Program, and with the goal to highlight the importance of disclosing information on hazardous chemicals in consumer products. The current study is part of ALHem's activities focused on monitoring of hazardous chemicals in consumer products available on the market of the Republic of Serbia with the aim to provide input into the implementation and enforcement of the national legislation governing consumer safety and targeting hazardous chemicals in products.

In October 2018, IPEN, Czech organisation ARNIKA, HEAL and 17 other European organisations, including ALHem, published a report "Toxic Loophole". The study

demonstrates that brominated flame retardants found in e-waste are carried into new consumer products as a result of plastic recycling. Brominated flame retardants are toxic chemicals known for interfering with functioning of thyroid gland and causing neurological and behaviour problems in children.

In 2017, ALHem led a public outreach campaign "Toxic Cash Receipt" aimed at drawing public attention to the presence of Bisphenol A (BPA) in thermal papers, primarily in fiscal receipts and card slips. BPA is an endocrine disrupting chemical known for its negative impact on the health of people. ALHem called upon governmental and public institutions, as well as private companies, especially trade chains, to

Sweden) and countries in the region (Albania, Armenia, Belaruss, Bosnia and Herzegovina, Macedonia, Montenegro, Russia and Serbia). Analytical analyses were conducted on 109 products to determine concentrations of certain brominated flame retardants in the laboratory of Prague University for Chemistry and Technology.

¹ "Toxic Loophole: Recycling Hazardous Waste into New Products" is study conducted by organisations, members of IPEN network. Between April and July 2018, 430 samples were collected in the following countries: EU member states (Austria, Belgium, Czech, Danmark, France, Germany, Netherlands, Poland, Portugal, Spain and

replace receipts with safer BPA free alternatives to avoid toxic exposure on the health of the vulnerable groups (e.g. cashiers, workers, women of childbearing age, teenagers and children) and the general population.

In 2015-2016 ALHem coordinated the "The Fight to Know!" campaign that was focused on the presence of phthalates in consumer products. The campaign was part of the project "Strengthening capacities and strategic partnership for safe chemicals management in the Republic of Serbia", which aimed at checking the practical implementation of legal provisions related to providing information about the presence of substances of very high concern (SVHC) in products and promotion of consumers' rights to obtain such information.

The "CRY-GAME" campaign focuses on raising consumer awareness on hazardous chemicals in toys and childcare articles and promotes the consumer's right to know about chemicals in children's toys to help them make informed choices.



² The projects was implemented by the Ministry of Agriculture and Environmental Protection with technical assistance of the United Nations Development Programme (UNDP) and financial support of "SAICM Quick Start Programme Trust Fund", in cooperation with civil society organisations: Safer Chemicals Alternative (ALHem) and Women in Europe for a Common Future (WECF).

)

PHTALATES – SUBSTANCES OF HIGH CONCERN DUE TO THEIR EFFECTS ON HUMAN HEALTH

Phthalates (esters of phthalic acid and aliphatic alcohols) are used in the production of polyvinyl chloride (PVC) plastics in order to soften them and reduce brittleness. However, these harmful chemicals do not bind to polymers (such as PVC) and are gradually released over time. Contact with products containing phthalates can exposure consumers to the harmful effects of these substances.

Consumers can be exposed to substances like phthalates from many products in everyday use, including kitchen utensils, school accessories, furniture, floor covers, electric and devices, cables, and electronic equipment, as well as toys, baby equipment and other products for children. Phthalates are added to plastics used to make toys in order to make toys softer and more pliable for play, and to reduce risk of injury to children..

The historic view

The development of cellulose nitrate plastic in the mid-19th century led to the patenting of the first plastics softener, called "Castor oil", in 1856. Within twenty years a substance known as camphor became favoured as a softer in the production of cellulose nitrate plastics over Caster oil. Phthalates were first used in 1920, and very soon replaced camphor, which was volatile and characterised by its intense smell. The development in the 1930s of one particular plastics softening substance from the phthalate group (di(2-etilheksil), commonly referred to as DEHP, revolutionised the PVC industry. DEHP remains in common use today.

IMPACT OF PHTHALATES TO CHILDREN'S HEALTH

Children are more sensitive to exposure to dangerous chemicals than adults. This is due to a larger skin surface in proportion to their weight, greater proportional lung capacity and a faster metabolism. As a consequence, children can ingest dangerous chemicals at faster rates than adults at a time when their immune and neurological systems are still developing.

Phthalates are substances that have proven toxic effects on reproduction: they have harmful effects on fertility and foetuses, and some –including DEHP, DBP, BBP, DIBP– have been proven to disturb the functioning of the endocrine system – these phthalates are known as Endocrine Disrupting Chemicals (EDCs).

Children are surrounded by plastic objects that contain dangerous chemicals that disturb the functioning of the endocrine system. Endocrine disrupting chemicals are substances that can impair functioning of endocrine system by taking over the role of hormones and blocking hormone receptors, which can in turn affect the development and functioning of the body. The effects of endocrine disrupting substances greatly depend on when they enter the body. They are particularly harmful they enter the body

during in critical phases of life, such as pregnancy (when they can influence the development of the foetus), early childhood and adolescence. During these critical developmental periods it is necessary to take special measures to protect people against exposure to and the effects of endocrine disrupting substances, as even very small doses can be harmful for development. It is therefore very important to pay attention to the furnishings in children's rooms and the toys they play with.



PRESENCE OF PHTHALATES IN TOYS IN THE EUROPEAN UNION

A report by the European Chemicals Agency (ECHA) in February 2018 highlighted the relatively large number of products on the European market that contain substances that are restricted for production, application or use. Inspectors from 27 countries tested the composition of 1,009 mixtures, 4,599 products and 17 substances, and identified that 18% of them do not comply with regulated restrictions and bans. One in five of the toys

that were tested contained phthalates above the prescribed limit.

Phthalates were the most common banned substances found in children's toys - with DEHP, DBP and BBP found in around 20% of toys. The origin of 39% of the samples that were found to possess banned substances is unknown. 17% of the samples found to possess banned substances were imported from China.

IMPORTANCE OF ECHA REPORT, 2018

The Report stresses that companies are responsible for obtaining information about the chemical composition of products they sell. Companies should proactively test products and sign agreements with suppliers guaranteeing that the chemical composition of products complies with legal requirements for chemicals. The Report also states that competent authorities should continue to support the legal framework, defined by Regulation 1907/2007 (REACH), and restrictions prescribed therein, and to analyse products placed on the market.

Further, the <u>results of enforcement activities in</u> <u>four EU countries</u> (Czech Republic, Poland, Hungary and Slovakia) showed that (out of 104 sample toys) more than one-third contained prohibited concentrations of phthalates.

The ECHA has also highlighted concerns over the effects phthalates on birds, sediment organisms, soil and mammals due to the use of animal feeds that contain phthalates.

Two recent studies revealed that exposure to phthalates in pregnancy can influence the speech-linguistic development of children and induce girls to enter puberty early.

In one of these studies, published in <u>JAMA Paediatrics</u>, the authors tested levels of phthalates in pregnant women and compared them with the language development of their children. The study included 963 mothers and children from Sweden and 370 mothers and children from the USA. The researchers used urinary samples of pregnant women during

early pregnancy to determine the presence of phthalates. Following childbirth parents we asked to fill in a questionnaire about the language development of their children (during the first 30 months in Sweden and during at least the first 24 months in the USA). Two particular phthalates –dibutyl phthalate (DBP) and benzyl butyl phthalate (BBP), both of which are classified as toxic for reproduction and as endocrine disruptive— were identified to be statistically significantly related to language delay in both the Swedish and American test groups.

The second recent study into human reproduction showed that daughters of mothers with higher levels of certain chemicals in the body during pregnancy entered puberty earlier. A connection was found with a substance that is a product of the degradation of diethyl phthalate (DEP), which is used as a component in fragrances, and triclosan, whichis an anti-bacterial agent used in certain soaps and toothpastes.

RAPID ALERT SYSTEM FOR NON-FOOD CONSUMER PRODUCTS IN THE EU (RAPEX)

According to data published in the Report of the Rapid Alert System for Non-Food Consumer Products in the EU (RAPEX) for 2017, the highest proportion of unsafe products in the EU are toys (29%), followed by motor vehicles (20%), clothes and textiles (12%), electric devices (6%), and baby care products (5%). The most common risks caused by these products are injury (28%) and chemical risk (22%), followed by choking, electric shock and fire. Consumers in Serbia lack awareness of the RAPEX publications and their recommendations.

Although Serbia has not yet joined the European Union, and is therefore not obliged to apply European law, under national law – pursuant to Article 16 of the Law on General Product Safety, adopted in 2009 (Official Gazette 41/09)– the Government of Serbia is obligated follow guidance issued by RAPEX by withdrawing products from the market of the Republic of Serbia and/or issuing relevant instructions to competent inspectorates and customs within 20 days of RAPEX providing

such instruction to EU member countries. Consumers are able check which products have been withdrawn from the European Union market and get information about withdrawn goods that may remain available on the Serbian market on the website of the rapid alert system for non-food consumer products by following this link:

https://ec.europa.eu/consumers/consumers_sa fety/safety_products/rapex/alerts/repository/c ontent/pages/rapex/index_en.htm

The 5 most notified products in EU - 2017

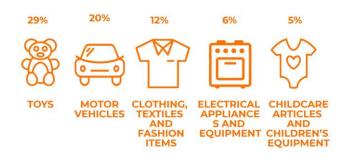


Figure 1. The 5 most notified products and 5 most notified risks in EU in 2017

The 5 most notified risks in EU - 2017



PRESENCE OF PHTHALATES IN TOYS IN THE REPUBLIC OF SERBIA

Pursuant to the Law on Health Safety of Consumer Goods (Official Gazette of RS, no. 92/2011), Law on Health Protection (Official Gazette of RS, no. 107/2005, 72/2009, 88/2010, 99/2010) and the **Programme of public health of the Institute for Public Health**, procedures are in place for the continual collection of data, monitoring and control of consumer goods in Serbia regarding the health safety. Reports on health safety of consumer goods are published annually. As part of measures to control the

physical-chemical safety of consumer goods data is collected on the number of tested samples and number of products identified to be unsafe (according to their origin and type). Testing includes visual checks, checks on declaration, composition, pH value, total migration, specific migration, content of lead, cadmium, mercury, arsenic, chromium, nickel, manganese, pesticides, preservatives, softeners and other tested parameters.

The Report on health safety of consumer goods in the Republic of Serbia in 2017 indicates that the products most commonly found to be physically and/or chemically unsafe in Serbia include toys (6%), kitchen utensils (4.8%) and personal hygiene products (4%).

Of the 384 samples of toys (358 imported and 26 of domestic origin) tested in 2017, 23 (6.0%) were found to be physically and/or chemically unsafe. Of the 215 imported sample toys tested for softeners (phthalates), 7 samples were found to be unsafe. Of the 9 domestic toys tested for phthalates none were found to be unsafe. Of the 224 toys tested in total for phthalates, 3 % were found to be unsafe.

NEPRO SYSTEM OF THE REPUBLIC OF SERBIA

Following the European model, the Republic of Serbia has established its own rapid alert system for consumer products in compliance with the Law on General Safety of Consumer Goods (Official Gazette of RS, no. 41/09). This system is called **NEPRO**. The aim of this system is to alert and facilitate rapid exchange of information between competent authorities in Serbia in order to enable the application of measures to mitigate risks posed by hazardous products to consumers' health and safety. The NEPRO system is part of the trade inspection system. The purpose of NEPRO is to protect consumers from unsafe products, educate actors in the market and raise awareness about the importance of product safety. There are 11 types of risk defined under NEPRO, all of which are related to risks posed by specific products: risk of burns, chemicals, choking, cuts, hearing damage, electric shock, explosion, injury, microbiological risk, risk of fire and risk of suffocation. Statistics indicate that clothes and textiles are most commonly labelled as hazardous - due to the risk of choking or irritation. Although NEPRO was established in

2009, awareness of its role is limited and much work remains to be done to educate and inform consumers and producers about the system and how it functions.

The NEPRO database contains only 7 products that have been withdrawn from the market and recalled from consumers (return of that have already products reached consumers) due to chemical risks – of these only 1 is a toy (perfumed toy with sound, publication number 395/2016). It is important to highlight that the report on health safety of consumer goods in Serbia from 2017 states that 7 toys have been found to contain prohibited concentrations of phthalate softeners; however, none of these toys are recorded in the NEPRO system. It is clear that the NEPRO database is not regularly updated and/or the results of inspections of toys conducted by sanitary inspectors are not being entered into it. The structure of NEPRO system is not simple enough to be used by untrained users. It is therefore necessary to improve system significantly in order to facilitate its usability and data searching.



3

REGULATORY AND STRATEGIC FRAMEWORK

Republic of Serbia is in the process of the European integration, and has been a candidate country since 2012. As a part of this process, the Republic of Serbia is obligated to harmonise its legislation with the EU acquis communautaire. In order to plan and monitor transposition of regulations, the Government of the Republic of Serbia has adopted the National Programme for the Adoption of Acquis Communautaire (NPAA). Its third revision of February 2018 stipulates full compliance of national legislation with the EU legislation by the end of 2021.

Legal framework on chemicals management has been considerably harmonised with the EU regulations, but further harmonisation of legal framework is needed, both through further harmonisation of regulations which will take into account new EU regulations, as well as through amending the existing ones, and through building capacities needed for implementation of regulations.

However, legal framework on the safety of toys currently in place in the Republic of Serbia is not harmonised with the EU Toy Safety Directive (2009/48/EC). The new draft Law on Consumer Goods, developed in Serbia in 2018, which also refers to toys, is better harmonised to the EU Directive. The draft has been adopted by the Government of the Republic of Serbia, and new draft of this law is now under parliamentarian procedure for adoption. Once the law is adopted, there is a time period of 18 months for the approval of the Rulebook on toys safety, which will reflect the EU Toy Safety Directive.



PHTHALATES

Regulatory framework for placement of products containing phthalates on the market lies with the Law on Chemicals and relevant legal regulations and rulebooks adopted on the basis of this Law. These are the Rulebook on restrictions and bans on production, placement on the market and use of chemicals (Official Gazette of RS no. 90/2013, 25/2015, 2/2016, 44/2017, 36/18), List of candidate substances of very high concern (Official Gazette of RS, no. 58/16, 22/2018), List of substances of very high concern (Official Gazette of RS, no. 94/13, 101/16, 22/18) which is, as well as other information about SVHC, available on the official website of the ministry responsible for environmental protection.

Substances that can cause serious effects to human health and environment are identified as Substances of Very High Concern - SVHC. These are, firstly, substances classified as carcinogenic, mutagenic, toxic for reproduction - CMR), as well as substances classified as persistent (long-lasting, difficult to decompose), bioaccumulative (accumulate in organisms), and toxic (Persistent, Bioaccumulative and Toxic - PBT), as well as very Persistent very Bioaccumulative- vPvB. This group also includes other substances of high concern, and substances that impair functioning of endocrine system (the so-called endocrine disruptors). **Potentials** demonstrating harmful effects vary depending on the potentials of the substance to cause them, concentration to which we were exposed and duration of the exposure, as well as on the age in which we were exposed. Due to their property of accumulation in the organism, SVHC can cause some of the above mentioned harmful effects, whether it is about single exposure to higher concentrations, on long-term or repeated exposure to the same or different substances in small concentrations. Therefore, increased incidence of cancer, foetus malformation, as well as development disorders with children, male and female sterility, diabetes, are only some of illnesses that can be considerably related to exposure to SVHC.

Substances of very high concern include, inter alia, certain substances from the phthalate group (esters of phthalic acid and aliphatic alcohols), which are most commonly used plastic softeners, and proved to have toxic effects on reproduction (can be harmful to fertility and to foetus) and proved to be endocrine disruptors. Phthalates can be found in plastic parts of various products for general use, but also in PVC floors, cables, hoses and coated fabrics, as well as on book covers. In fact, phthalates are added to polyvinyl chloride (PVC) as additives for softening and reducing the brittleness, but are not bound to polymer and are gradually released from PVC materials, therefore the contact with products containing them can cause exposure of user to harmful effects of these substances. Provisions of Article 27 of the Law on Chemicals comprise 9 phthalates falling under substances of very high concern, since they are placed on the Candidate List of SVHC. The list of phthalates contained in Article 27 of the Law on Chemicals is presented in Table 1.

	Name of the substance and acronym	Acronym	EC. no.	CAS no.
1.	Di-(2-etylhexyl) phthalate (synonym: bis(2-etylhexyl) phthalate)	DEHP	204-211-0	117-81-7
2.	Benzyl butyl phthalate	BBP	201-622-7	85-68-7
3.	Dibutyl phthalate	DBP	201-557-4	84-74-2
4.	Diisobutyl phthalate	DIBP	201-553-2	84-69-5
5.	Di-n-pentyl phthalate	DNPP	205-017-9	131-18-0
6.	Diisopentyl phthalate	DIPP	210-088-4	605-50-5
7.	n-pentyl-isopentyl phthalate	NPIPP	-	776297-69-9
8.	Di-(2-metoxyethyl) phthalate (synonym: bis(2-etoxyethyl) phthalate)	DMEP	204-212-6	117-82-8
9.	Di-n-hexyl phthalate	DNHP	201-559-5	84-75-3

If some of the listed phthalates are present in an article in concentration of more than 0.1% weight, producers, importers distributors of the product are obliged to submit information at a consumer's request sufficient for safe use of that product, at least the name of the substance. For time being, these articles are allowed on the market. However, according to the Commission Regulation 2018/2005 four phthalates (DEHP, BBP, DBP and DIBP) will be banned from articles used by consumers, or available in indoor areas, in a concentration equal to or above 0.1% by weight individually or in any combination in any plasticised material. These phthalates shall not be placed on the EU market after 7 July 2020 in articles and thereafter the national legislation of Serbia will be updated accordingly.

In addition there are also regulations on chemicals defining bans and restrictions for use of certain phthalates in toys and baby care products (Table 2). In fact, the Rulebook on restrictions and bans on production, placement on the market and use of chemicals (Official

Gazette of RS no. 90/2013, 25/2015, 2/2016, 44/2017, 36/18) bans three phthalates (DEHP, DBP, BBP) from the SVHC list in toys and baby care products in concentrations of more than 0.1% by weight. Three more phthalates (diisononyl phthalate – DINP, di-isodecyl phthalate - DIDP, di-n-octyl phthalate - DNOP) are banned from toys that children can put into the mouth. These phthalates have not been included into the SVHC candidate list yet. Additionally, according to the EU Directive on the Safety of Toys (2009/48/EC), presence of CMR substances is not allowed in concentrations equal or higher than the specific limit concentration for classification into relevant hazard class, which is 5% for DIBP, when it comes to toxicity for reproduction. This EU regulation has not been harmonised with the national legislation of Serbia yet.



Table 2. Bans and restriction for use of certain phthalates in toys and baby care products

Extract from Part 1, Annex 1 of the RULEBOOK ON RESTRICTIONS AND BANS OF PRODUCTION, PLACEMENT ON THE MARKET AND USE OF CHEMICALS

(Official Gazette of RS, no. 90/13, 25/15, 2/16, 44/2017, 36/18)								
No. of ban and restriction	Name of the substance, group of substances or mixtures, CAS number and EC number	r Restrictions and bans						
51.	Phthalates a) <i>Bis</i> (2-ethylhexyl) phthalate, DEHP CAS no. 117-81-7, EC br. 204-211-0	1. Use of this substances or mixtures containing them in toys and baby care products is banned in concentrations exceeding 0.1% (m/m) of plasticised material.						
	b) Dibutyl phthalate, DBP CAS no. 84-74-2, EC br. 201-557-4	2. Placement on the market of toys and baby care products containing more than 0.1% (m/m) of these phthalates is banned.						
	v) Benzyl butyl phthalate BBP CAS no. 85-68-7, EC br. 201-622-7	3. A baby care products means any product that eases sleep, relaxes, maintains hygiene, is used for feeding or breastfeeding of infants.						
52.	Phthalates a) Di- isononyl phthalate, DINP CAS no. 28553-12-0 and 68515-48-0, EC no. 249-079-5 and 271-090-9 b) Di-isodecyl phthalate, DIDP CAS no. 26761-40-0 and 68515-49-1, EC no. 247-977-1 and 271-091-4	1. Use of this substances or mixtures containing them in toys and baby care products that children can put in the mouth is banned in concentrations exceeding 0.1% (m/m) of plasticised material. 2. Placement on the market of toys and baby care products containing more than 0.1% (m/m) of these phthalates is banned. 3. A baby care products means any product that						
	v) Di-n-octyl phthalate, DNOP CAS no. 117-84-0, EC no. 204-214-7	eases sleep, relaxes, maintains hygiene, is used for feeding or breastfeeding of infants.						

CHILDREN'S TOYS

The current Serbian national legislation on the safety of toys is not harmonised with the EU Toy Safety Directive. A comparative analysis of

the EU and Serbian Toy Safety regulations is provided in Table 3

Table 3. Regulations in the EU and in Serbia pertaining to children's toys

Oblast	Evropska Unija	Republika Srbija
Toys	Directive on the Safety of Toys (2009/48/EC), with amendments 2014/84/EU and 2017/898/EU	Current regulations in Serbia pertaining to safety of toys are not harmonised with the EU regulations.
	Prescribes, inter alia, the conditions for acquiring CE marking, notification and Conformity Report.	Current regulations are: Law on Health Safety of Products of General Use (Office Gazette of RS 92/11)
	Directive on General Product Safety (2001/95/EC)	Rulebook on conditions related to Law on health safety of products of general use that can be placed on the market (Official Gazette of SFRY 17/91)
		However, in 2018 new draft Law on Consumer Goods was prepared, covering also the topic of toys (currently under parliamentarian procedure), and the Rulebook on the safety of toys is being prepared, so legal framework pertaining to toys is expected to be compliant with the EU Directive on the Safety of Toys 2009/48/EC by the end of 2019.
		Law on General Product Safety (Official Gazette of RS, no. 41/09).
		Law on Technical Requirements for Products and Conformity Assessment (Official Gazette of RS, no. 36/09)

New draft Law on Consumer Goods

Part VIII of the draft Law on Consumer Goods, Articles 39-56, defines a toy as an item, includes obligations of entities involved in the production, import and trade toys (obligations of producers, authorised representatives, importers, distributors), toy safety requirements (general and specific safety requirements, warnings, assumption of toy conformity, declaration on conformity, rules and conditions for placement of conformity sign, conformity assessment, type overview), required technical documents.

Articles 57-59 define main requirements for a designated notified body for conformity assessment of toys, rules of operation, as well as supervision of the notified body work by the Ministry of health.

Articles 60-61 define the ways how to handle toys that pose risk and how to handle toys in case of formal non-conformity.

Content of label on toys

Although Article 8 of the Law on Consumer Product Safety (Official Gazette of RS, no. 92/2011) clearly states that a product of general use to be placed on the market of Serbia must have a label, the Ministry of health has not adopted a bylaw (which should have been adopted within six months following the adoption of this law) to explain the way of labelling, content of the label and information requirements on product labels.

It should be noted that the new draft Law on Consumer Goods is in parliamentarian procedure (published on the website of the Assembly of Serbia at the end of September 2018), part VIII, which refers to toys, contains clear provisions pertaining to the content of product label, as well as obligations of entities involved in trade. It is expected that regulatory framework in that sense will be significantly improved and harmonised with the EU Directive on the Safety of Toys.



CE conformity mark and Serbian mark of conformity

CE mark denotes that toy was designed and produced in compliance with health, safety and other relevant regulations of the EU Toy Safety Directive. CE originates from French title "Conformite Europeenne" or "conforms to standards, rules and laws". According to the European Directive on the Safety of Toys 2009/48/EC, all toys placed on the EU market must have a CE mark (Figure 2.).

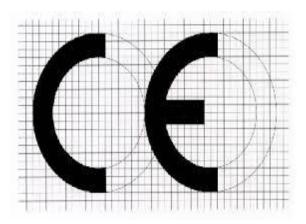


Figure 2. CE mark

When a producer puts CE mark on a toy, it guarantees that the product is in compliance with the EU Toys Safety Directive. The producer may use final products, parts or components for the production of final products, but they always have to remain responsible for the product. Having said that, the producers are advised to procure product components from reliable suppliers, who hold all necessary certificates, attests, CE mark and/or test results issued by accredited laboratories for goods they deliver, and are fully in compliance with the relevant EU legislation.

Serbian mark of conformity is a sign which a producer puts on a product to demonstrate

that the product is in compliance with the relevant national legislation (Figure 3.).

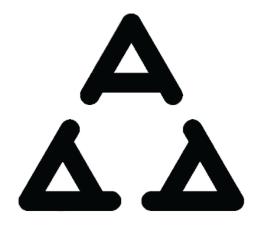


Figure 3. Serbian sign of conformity

A list of standards for conformity of toys (SRPS EN 71) will be published along with the bylaw to the new Law on Consumer Goods to regulate toy safety.

The Law on Technical Requirements for the Production and Conformity Assessment (Official Gazette of RS, no. 36/09) prescribes that the producer puts a conformity sign, which is harmonised with the technical regulation.

The new draft Law on Consumer Goods stipulates the obligation of toy producers to prove the compliance of their products with the national legislation. By adding the mark of conformity to the product along with the product declaration on conformity, the producer demonstrates that a product meets conformance requirements specified in relevant standards, rules and laws.

VIEW TO SAICM PROGRAMME ON CHEMICALS IN PRODUCTS AND LINK WITH CORRESPONDING SDG'S GOALS

Safer Chemicals Alternative (ALHem) is a civil society organisation in Serbia which advocates for reduction of risks from dangerous chemicals with the aim of protecting human health and environment. ALHem is a member of international IPEN network, which has been advocating for the future without toxic chemicals since 2013.

ALHem conducted analysis of the presence of banned or restricted phthalates in toys and childcare articles with the aim at raising public awareness on toy health safety in Serbia. The study is a part of "CRY-GAME" outreach campaign supported by IPEN Programme on Chemicals in Products "Raising Awareness on Health Impact of the Chemicals Used in Children Toys and Childcare products".

In addition the study was aimed at promoting the implementation of the Strategic Approach to International Chemicals Management (SAICM) Chemicals in Products Program (SAICM CiP Program) and associated Guidance in Serbia to improve information disclosure on what chemicals are in children's products, including toys.

ALHem fully supports the SAICM Overarching Policy Strategy and the goal to achieve safe chemicals management throughout the entire life cycle by 2020, i.e. to ensure that chemicals are produced and used in the way that will have minimal negative impact on human health and environment.

An objective of the SAICM Overarching Policy Strategy is that "That information on chemicals throughout their life cycle, including, where appropriate, chemicals in products, is available, accessible, user friendly, adequate and appropriate to the needs of all stakeholders. Appropriate types of information include their effects on human health and the environment, their intrinsic properties, their potential uses, their protective measures and regulation." ¹

The first measurable objective to implement SAICM Policy Strategy is "to monitor 50 chemicals of concern in consumer products in 75 countries with publicly available results completed by 2025". Groups of chemicals that might be prioritized include persistent, bioaccumulative and toxic substances (PTS); very persistent and very bioaccumulative substances; chemicals that are carcinogens or mutagens or that adversely affect, inter alia, the reproductive, endocrine, immune or nervous systems; persistent organic pollutants (POPs), mercury and other chemicals of global concern; chemicals produced or used in high volumes; chemicals subject to wide dispersive uses; and other chemicals of concern at the national level.

-

¹ http://www.saicm.org/Portals/12/Documents/saicmtexts/New SAICM Text with ICCM resolutions_E.pdf

Certain substances from the phthalate group have toxic effects on reproduction (can be harmful to fertility and to foetus) and proved to be endocrine disruptors. They met the criteria to be prioritized and selected as chemicals of high concern in Serbia.

As already stressed in the SAICM Programme on chemicals in products (section 49 "information of importance for the protection of human health and environment cannot be deemed confidential..."), it is essential than provision referred to in Article 27 of the Serbian Law on Chemicals (corresponding to Article 33 of the EU REACH Regulation) which enables the consumer to require information about the presence of SVHC in products and to exercise their right free of charge, should be used in practice as much as possible. Consumers are, in this way, given a chance to find out whether chemicals which have not yet been banned or restricted for use in products are present in a product they intend to buy, and based on that to make a decision about the purchase. The consumer thereby has a chance to influence production of products they buy.

However, it is necessary to note that this EU provision "The Right to Know", implemented in Serbian national legislation, pertains only to a limited number of dangerous substances belonging to the so-called substances of very high concern (SVHC), listed on the ECHA List of candidate substances https://echa.europa.eu/candidate-list-table, where there are 197 at the moment.

Objectives of the SAICM Programme on chemicals in products primarily refer to the improvement of communication, in particular:

- exchange of information between the participants in supply chain, with the aim of ensuring safe chemicals management through established communication tools, i.e. mechanisms
- provision of information by product supplier outside the supply chain so as to enable the consumers to make proper decisions in choosing and purchasing desired product
- ensuring the information is correct, valid and available.

Although SAICM CIP is a voluntary mechanism, this is the only international instrument that could enable that information on all present chemicals in products (not only SVHC) is transparent, reliable and available. So far, only five organisations acceded the SAICM CiP, none of which from toy industry. We think that, if implemented, SAICM CiP would become an important international instrument which would lead to safer and more sustainable products, lower exposure to chemicals, safer waste management, better human health and cleaner environment.

ALHem fully supported IPEN's goal for CiP implementation:

"To ensure that full health and safety information and the complete identity of chemicals (as well as the amount) in individual constituent components of products are publicly available throughout the entire product life-cycle, including during product manufacture, use, recycling and/or disposal."

As well as the following positions:

- The CiP programme recommends that stakeholders identify, at a minimum, regulated chemicals in products to continue advancing national legislations.
- Urge companies to proactively move beyond a legally restricted substances list.
- Confidential business information should not undermine the key chemical safety principle.
- CiP should acknowledge workers and their need for full information about the chemicals they work with.
- Financial support for broad CiP Programme implementation in developing and transition countries

SAICM has developed targets and policy instruments to achieving relevant Sustainable Development Goals (SDGs). Relevant SDGs for Chemicals in Products are primarily 3, 8, and 16.2

This project contributed to implementation of SDG 3, **SAICM target 3.1** "Establish chemical control laws and ratify the chemicals conventions" and to concrete measure No.9 where is stated:

"Adopt policy instruments in 75 countries by 2025 that prohibit carcinogenic, neurodevelopmental toxicants, and <u>endocrine-disrupting chemicals</u> from products, including personal care and cleaning products, food contact materials, and <u>toys/childcare products</u>, in favor of safe substitutes; 150 countries by 2030. "

This project also contributed to implementation of SDG 8, **SAICM target 8.8**: "Protect labour rights and promote safe and secure working environments for all workers", in this case the workers who are engaged in the supply chain of toys and child-care products.

This project also contributed to implementation of SDG 16, **SAICM target 16.1** "Provide publicly available information on the adverse effects of all chemicals in commerce", particularly concrete measures <u>No.1</u> where is stated: "Private sector publicly provides comprehensive and verifiable information on adverse effects for all chemicals in commerce by 2030, including mutagenicity, carcinogenicity and adverse effects on the reproductive, developmental, endocrine, immune and nervous systems" and measure <u>No.3</u> "Private sector implements the SAICM chemicals in products programme in 150 countries by 2030."

Serbia is currently in the process of establishing an institutional framework for monitoring the implementation of SDGs. Serbia's Sustainable Development strategy expired in 2017 and the last report of implementation of the Milenium Development Goals for the period of 2000-2015 was prepared in 2015. The most recent national report called "Serbia and Agenda 2030" mapped the existing sustainable development national strategic framework in relation to the SDGs as a starting point for the dialogue and decision-making on prioritization of SDGs at the national level. According to this report, Serbia has several strategies aimed at supporting the implementation obligation.

² SDG 3: Ensure healthy lives and promote well-being for all at all ages; SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

4

CAMPAIGN CRY-GAME

Safer Chemicals Alternative (ALHem) conducted analysis of the presence of banned or restricted phthalates in toys and childcare articles with the aim at raising public awareness on toy health safety in Serbia. The study is a part of "CRY-GAME" outreach campaign supported by IPEN Programme on Chemicals in Products "Raising Awareness on Health Impact of the Chemicals Used in Children Toys and Childcare products".

The goal of the campaign

The goal of the campaign is to focus public attention on toxic chemicals in plastic toys, with a particular emphasis on phthalates, and their threat to the health of children due to their typical mouth to hands behaviour and regular contact with such toys.

The subject of the campaign

Fifteen samples of toys and baby care products, including 13 plastic toys and two baby care products were purchased and laboratory tested for banned or restricted phthalates at concentrations of more than 0.1% (m/m) pursuant to the Rulebook on restrictions and bans of production, placement on the market and use of chemicals (Official Gazette of RS, no. 90/2013, 25/2015, 2/2016, 44/2017, 36/2018).

Methodology of the campaign

Fifteen samples of children's toys and baby care products were partially or completely made of plastic. The samples were purchased in two stores selling consumer goods from Asian countries and two specialised toys stores (Table 3).

Table 3. Tested samples of children's toys and baby care products

SAMPLE	e 3. Tested samples NAME AND	SAMPLE	PRODUCER	IMPORTER	TRADEMARK	TDADED
TYPE	DESCRIPTION OF THE PRODUCT	ID	PRODUCER	IMPORTER	TRADEMARK	TRADER retail
Children's toys	Yellow duck – bath toy	SRB-1	No data	Hong Fa Ltd Pančevo	No data	Fu Hao Ltd, Belgrade
Children's toys	Sea animals – bath toys	SRB-2	No data	Xun Teng Ltd N.Beograd	SH (Sheng Da Kong Toys) no indication of registration	Fu Hao Ltd, Belgrade
Children's toys	Peppa Pig collection – bath toys	SRB-3	No data	Corolla Trade doo Belgrade	Bath toy series, Baby bath good companion - no indication of registration	ABC Outlet Centre, Belgrade
Children's toys	Pony (horse)	SRB-4	No data	Xun Teng Ltd N. Belgrade	No data	Fu Hao Ltd, Belgrade
Children's toys	Puppy from Paw Patrol collection	SRB-5	No data	Xun Teng Ltd N. Belgrade	PAW Patrol – no indication of registration	Fu Hao Ltd, Belgrade
Children's toys	Plastic doll	SRB-6	No data	Hong Fa Ltd Pančevo	Moppet Shirly, no indication of registration	Fu Hao Ltd, Belgrade
Children's toys	Masha doll	SRB-7	No data	nema podataka	From the collection "Masha and the Bear" – no indication of registration	Fu Hao Ltd, Belgrade
Children's toys	Yellow duck – bath toy	SRB-8	Infantino B Kids International Ltd.	FORMA VS Ltd, Beograd	Infantino, Blue-Box Toys –registered	Enci Menci, Belgrade
Children's toys	Sea animals – bath toys	SRB-9	Playgro Pty Ltd.	FORMA VS doo, Belgrade	Playgro- registered	Enci Menci, Belgrade
Children's toys	Yellow duck – bath toy	SRB-10	Canpol sp.z.o.o.SKA	MCG Group, Novi Sad	Canpol babies- registered	Dexy Co Kids, Ltd Belgrade
Children's toys	Puppy from Paw Patrol collection	SRB-11	Spin Master International S.A.R.I.	Orbico trade and services Ltd., Belgrade	PAW Patrol, Nickelodeon- registered	Dexy Co Kids, doo Belgrade
Children's toys	Plastic book – bath toy	SRB-12	Best Luck LS	Dexy Co Kids, Ltd Belgrade	Best Luck- no indication of registration	Dexy Co Kids, Ltd Beograd Belgrade
Children's toys	Soft rugby ball	SRB-13	Hua Jun	Boj Komerc Ltd., Belgrade	No data	Dexy Co Kids, Ltd Belgrade
Baby care product	Bib with interior side made of white polymer material	SRB-14	Label is missing	Label is missing	Label is missing	ABC Outlet Centre, Belgrade
Baby care product	Bib, interior side made of white polymer material	SRB-15	Label is missing	Label is missing	Label is missing	ABC Outlet Centre, Belgrade

Laboratory testing of the content of phthalates was conducted in the Institute for Public Health "Milan Jovanović Batut" in December 2018. The laboratory is accredited by the Accreditation Body of Serbia according to SRPS ISO/IEC 17025 standard, and has accredited methodology for determining content of phthalates in product samples, i.e. consumer goods, it is technically equipped for analysing content of phthalates in products made of plasticized materials.

Samples were prepared and analysed according to the accreditation documents: VDM-98 which is defined within the Accreditation Scope 01-130 with the following elements: Determining content of softeners (Di-butyl benzyl phthalate, Di-butyl phthalate, Di-loutyl phthalate, Di-noctyl phthalate, Di-isononyl phthalate) applying technique HPLC/DAD (Test Method: CPSC-CH-C1001-09.3 Standard Operating Procedure for Determination of Phthalates 1

April 2010). The methodology is accredited for children's toys and plastic materials, as well as for items that come in contact with food, for the range of 0.01% to 20% (m/m). Test results are presented in the report as percentage content of phthalates.

Phthalates analysed in products include: Bis(2-ethylhexyl) phthalate (DEHP); Dibutyl phthalate (DBP), Benzyl butyl phthalate (BBP), Diisononyl phthalate (DINP), Diisodecyl phthalate (DIDP), Di-n-octyl phthalate (DNOP), Diisobutyl phthalate (DIBP). All listed phthalates are toxic for reproduction, i.e. they can negatively affect fertility and foetus, and some of them (DEHP, DBP, BBP, DIBP) are identified as endocrine disruptors.

RESULTS OF LABORATORY TESTING AND CONCLUSIONS

Laboratory analysis of 15 samples found 7 samples (46.6 %) Di-(2-ethylhexyl) phthalates – DEHP at concentration from 0.5 to 31.5 % (m/m) (Figure 4., Table 4.). These data significantly exceed the results of the similar tests conducted in 2017 by the Institute for Public Health of Serbia Milan Jovanović Batut and published in the Report on health safety of products for general use in the Republic of Serbia. Only 3.3% of toys tested in 2017 contained softeners at concentrations that violated the national health safety standards.

Our analysis indicate that 5 out of 7 samples with high levels of DEHP were purchased in stores which sell goods from Asian countries. Out of 4 tested toys purchased in DexyCo Kids, 2 toys had increased content of phthalates.

None of the two tested samples of products for baby care (bibs with plastic material from the inside) contained tested phthalates.

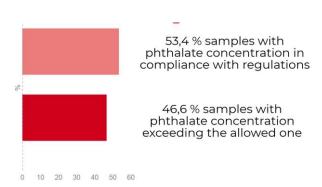


Figure 4. Results of laboratory testing of phthalates in samples

Table 4. Children's toys with concentration of phthalates higher than the allowed one

SAMPLE TYPE		E ID/part toy	DEHP [%]	BBP [%]	DBP [%]	DINP [%]	DnOP [%]	DIDP [%]	DIBP [%]
Children's toy	SRB-1		25,9 ±3,6	<0,01	0,04±0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-2	crab	0,07±0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		pony	0,09±0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-3	Daddy	13,8±1,9	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		Pig George Pig	8,6±1,2	<0,01	0,08±0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-4		21,4 ±3,8	<0,01	0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-5		<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-6	Head	31,5 ±4,4	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		leg	<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		Arm	0,52±0,07	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-7	leg	<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		shoe	<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		Head	22,9±3,2	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-8		<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-9	crab	<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		shell	<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
		duck	<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-10		<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-11		<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-12		0,92±0,12	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Children's toy	SRB-13		19,9±2,8	<0,01	<0,01	0,27 ± 0,08	<0,01	<0,05	<0,01
Baby care product	SRB-14		<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01
Baby care product	SRB-15		<0,01	<0,01	<0,01	<0,05	<0,01	<0,05	<0,01

*red i pink marked results/samples where phthalates concentration exceed allowed one

Presence of DEHP in 7 sample toys in concentrations of more than 0.1% (m/m) has, as a consequence, violation of ban no. 51 prescribed by the Rulebook on restrictions and bans on production, placement on the market and use of chemicals for these types of products, which is a commercial offence. Immediately after receiving and analysing the laboratory results, ALHem submitted data to the Sanitary Inspectorate of the Ministry of Health to conduct non-routine inspection control, delivering complete documentation, so we expect that toys exceeding allowed concentrations of phthalates will be withdrawn from the market and recalled by the consumers

(measure of returning the product that has already reached the consumer).

In addition, it is important to note that no sample was positive to presence of DIBP which is listed on the SVHC list, but is not covered by bans 51 or 52. Additionally, it is necessary to stress that according to the EU regulations on toys, which have not yet been implemented in the national legislation, presence of CMR substances is not allowed in concentrations equal or higher than the specific limit concentration for classification into relevant hazard class, which is 5% for DIBP, when it comes to toxicity for reproduction.

ANALYSIS OF CONTENT OF THE LABEL ON TESTED TOYS AND CONSLUSIONS

Although Article 8 of the Law on Health Safety of Products of General Use (Official Gazette of RS, no. 92/2011) clearly states that a consumer product must have a label, the ministry of health has not adopted a bylaw (which should have been adopted within six months following the adoption of this law), which would require labelling of consumer products with relevant information included.

Taking into account that new draft Law on Consumer Goods is in parliamentarian procedure (published on the website of the Assembly of Serbia at the end of September 2018), part VIII, which refers to toys, contains clear provisions pertaining to the content of label, as well as obligations of entities involved in trade with toys, it is expected that regulatory framework in that sense will be significantly

improved and harmonised with the EU Directive on the Safety of Toys.

Pursuant to the provisions of this new draft Law on Consumer Goods, producers and importers are obligated to state clearly the following information on the label or packaging of the toy:

-type, batch, serial or model number or other element which enables identification of a toy, or if this is not possible due to size or nature of the toy, to put necessary information on the packaging (or in a document attached to the toy),

- name, registered trade name or registered trademark and contact address,
- toys delivered to the market must have conformity sign.

Analysis of labels content of tested sample toys is given in Table 5.



Table 5. Analysis of labels from tested samples of children's toys and baby care products according to the new draft Law on Consumer Goods

Internal product code ¹	Type, batch, serial or model number	Name, registered trade name or registered trademark and producer's contact address	Name, registered trade name or registered trademark and importer's contact address	Conformity sign/ CE marking	Fulfilment of requirements in terms of the content of label ² (Yes/No)
SRB-1	-	No data	Name of the importer, but no trademark or importer's address	CE mark	No
SRB-2	-	No data	All data stated	CE mark	No
SRB-3	+	No data	Importer's name, no address	CE mark	No
SRB-4	-	No data	Importer's name and address, no trademark	CE mark	No
SRB-5	-	No data	Importer's name and address, no trademark	CE mark	No
SRB-6	-	No data	Importer's name, but no address, no data whether the subject trademark is registered	CE mark	No
SRB-7	-	No data	No data	CE mark	No
SRB-8	+	All data stated	All data stated	CE mark	Yes
SRB-9	+	All data stated	All data stated	CE mark	Yes
SRB-10	+	All data stated	All data stated	CE mark	Yes
SRB-11	+	All data stated	All data stated	CE mark	Yes
SRB-12	+	Name, but no address, no data about trademark	Importer's name and address, no data about trademark	CE mark	No
SRB-13	+	Name, but no address, no data about trademark	Importer's name and address, no data about trademark	CE mark	No

¹ Product identification is provided in Table 3 ² According to new draft Law on Consumer Goods, September 2018.

Analysis of information available on product labels showed that only 30% of toy samples met the requirements of the new draft Law on Consumer Goods. These products were purchased in specialised stores selling toys of well-known producers with registered trademarks. None of analysed toys purchased in stores selling goods from Asia has not met the requirements of the new draft Law on Consumer Goods. Only 30% of analysed labels contain necessary information about the producer.

Although all toys tested in the frame of the project contained CE mark on their labels or packages, more than 50% of samples tested contained high levels of phthalates which violated the EU regulations and the national legislation of Serbia. Placing the CE mark on the product should guarantee that a product meets

conformance requirements specified in EU standards and legislation. However, our project confirmed that the CE mark on the products purchased in Serbia does not guarantee product safety for consumers which jeopardise consumers' right to know and access to information they need to make the right choice.

The Ministry of Health of the Republic of Serbia (Sector for Inspection Control), as the competent authority, has been informed about the results of these chemical analyses by ALHem and a request has been submitted for non-routine inspection control. The Ministry failed to reply to this request within the 30 day period within which it is legally required to do so. As of the publication of this report, ALHem has still not received a reply from the Ministry.



RECOMMENDATIONS

Based on the results of the study, ALHem prepared recommendations for competent state authorities, private companies, civil society organisations and consumers, with the aim of protecting the health of children from exposure to dangerous chemicals which can be found in toys:

For competent state authorities:

- Adopt as soon as possible the new draft Law on Consumer Goods, and the relevant bylaw that should be fully harmonised with the EU Toys Safety Directive (2009/48/EC), including all related amendments (2014/84/EU, 2017/898/EU).
- Conduct regular monitoring and inspection of imported and locally manufactured toys, as well as toys sold in local stores, especially in stores with consumer goods imported from Asian countries.
- In case of the violation of the national legislation of toy safety is revealed, ensure that such products are taken off the market and appropriate penalties and fines are applied.
- Strengthen control over illegal toy trade to ensure that toys are sold exclusively in specialised stores and toy sale in the streets or at the market place is strictly prohibited.
- Adopt a Monitoring programme for consumer goods which includes toys, as well as plans for its implementation, and ensure that necessary finances are allocated in the national budget to enable the implementation.
- Improve the Annual Report on Health Safety of Consumer Goods by including new data on hazardous chemicals present in toys.
- Regularly update NEPRO system for publication of unsafe products, including toys, as well
 as other products with regard to chemical risk, and significantly improve the structure of
 the database in order to facilitate data searching.

For companies dealing with toys

- Strictly obey the rules pertaining to toy safety in the Republic of Serbia.
- Producers are recommended to procure components and parts for their products from reliable suppliers, who hold all necessary certificates, attests, CE marking or test results issued by authorised laboratory for goods they deliver.
- No data no market principle should be enforced to ensure that importers, distributors and traders have all necessary information about product chemical content before placing it on the market in Serbia.

For civil society organisations, including organisations for consumer protection

- Implement continual campaigns with the aim of informing and educating consumers about risks of children's exposure to dangerous chemicals that can be found in toys.
- Actively participate in public consultations pertaining to adoption of regulations on toys safety.
- Monitor the implementation of adopted regulations by conducting analysis of product samples for the presence of hazardous chemicals, as well as analysis of the product label to draw attention of competent authorities and the general population to the problem of toy safety.

For consumers

• Avoid toys made of plastic polymers, especially of PVC, since they can contain softeners such as phthalates. You will recognise this material according to recycling sign, number 3



- Avoid toys made of hard polycarbonate plastic which can contain Bisphenol A (BPA). You
 - will recognise this material according to recycling sign 7 other (except specifically stated that the product is made of bioplastic).
- CE marking on the label or packaging of a toy is not a guarantee that the toy meets all prescribed safety requirements.
- Purchase toys in specialised toy stores, do not buy them in streets or at the market.
- Request product label! A toy with the label that contains all necessary data, especially the one that states the name of the manufacturer, as well as registered trade mark is more likely to be safe.
- Use your right to ask! Based on the Law on Chemicals, you are entitled to ask the trader and get the answer if the toy you are planning to buy contains any dangerous chemicals (a substance of very high concern). You can find a model template for such request on the ALHem's website.
- Avoid toys made of hard black plastic since they most probably originate from recycled plastic which can contain "flame retardants", such as polybrominated diphenyl ethers.
- Search for information on the product label "no PVC", "phthalates/softeners free" and/or "BPA free".
- Avoid toys with strong smell! They can be a trigger for allergies.
- Fewer sometimes means more! Think carefully about your child's needs.
- Ventilate the rooms regularly! Phthalates present in toys and other household products can end up in house dust.

REFERENCES

Agay-Shay K, Martinez D, Valvi D, Garcia-Esteban R, Basagaña X, Robinson O, Casas M, Sunyer J, Vrijheid M. Exposure to Endocrine-Disrupting Chemicals during Pregnancy and Weight at 7 Years of Age: A Multi-pollutant Approach. Environ Health Perspect. 2015: 123 (10) 1030-7. doi: 10.1289/ehp.1409049.

Alhem. Toksični račun, Ispitivanje sadržaja bisfenola A u termalnom papiru, plastičnoj i papirnoj ambalaži za hranu, Novembar 2017 (in Serbian)

Arnika. Toxic loophole. Recycling Hazardous Waste into New Products, 2018

Batut, Institut za javno zdravlje Srbije "Dr Milan Jovanović Batut". Izveštaj o zdravstvenoj ispravnosti predmeta opšte upotrebe u Republici Srbiji u 2017. godini, 2018 http://www.batut.org.rs/download/izvestaji/hig ijena/Zdravstvena%20ispravnost%20predmeta%2 oop%C5%A1te%20upotrebe%202017.pdf (in Serbian)

Bornehag C, Lindh C, Reichenberg A. Association of Prenatal Phthalate Exposure With Language Development in Early Childhood. JAMA Pediatr. 2018: 172 (12) 1169–1176. doi:10.1001/jamapediatrics.2018.3115

Braun, JM, Sathyanarayana S, Hauser R. **Phthalate exposure and children's health.** Current Opinion in Pediatrics. 2013: 25(2) 247-54.

ECHA, European Chemicals Agency, FORUM REF-4 PROJECT REPORT. **Harmonised Enforcement Project on Restrictions**, Version 1.0, 2018

Harley KG, Berger KP, Kogut K, Parra K, Lustig RH, Greenspan LC, Calafat AM, Ye X, Eskenazi B; Association of phthalates, parabens and phenols found in personal care products with pubertal timing in girls and boys. Human Reproduction, 2019: 34 (1) 109–117. https://doi.org/10.1093/humrep/dey337

Kobylecka A, 2nd Conference on REACH, CLP & Biocides Enforcement. Collaboration of authorities in enforcement of chemical legislation, 2018.

https://ec.europa.eu/docsroom/documents/325 05

RAPEX - Rapid Alert System for Dangerous products – 2017 Annual Report FOR DANGEROUS PRODUCTS – 2017 ANNUAL REPORT. 2017 Results of the EU Rapid Alert System for dangerous non-food products, ISBN 978-92-79-80423-6 doi:10.2838/031929

RS 2015. **Zakon o hemikalijama**, Službeni glasnik RS, br. 36/2009, 88/2010, 92/2011, 93/2012 i 25/2015 (in Serbian)

ANNEX: SAMPLES OF TOYS AND BABY CARE PRODUCTS TESTED AGAINST PHTHALATES







SRB-1

SRB-2

SRB-3







SRB-4

SRB-5

SRB-6







SRB-7

SRB-8

SRB-9







SRB-10

SRB-11

SRB-12







SRB-13

SRB-14

SRB-15



office@alhem.rs

The authors would like to thank Olga Speranskaya for review and for valuable comments and suggestions towards improving this report.

Photos: Pixabay, chuttersnap, click-and-boo, markusspiske, rawepixel, Vanessa-bucceri onUnpsplash February 2019





