FLAME RETARDANT TCEP should be banned FROM all toys

ANEC/BEUC joint position

Contact:  Sylvia Maurer – environment@beuc.eu  
          Tania Vandenberghe – tv@anec.eu

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Summary

ANEC and BEUC have been consulted by the European Commission on an opinion of the Scientific Committee on Health and Environmental Risks (SCHER) with regard to TCEP in toys. TCEP is a flame retardant which is carcinogenic and endocrine disrupting and may be contained in toys as well as other consumer articles.

In this position paper ANEC and BEUC recommend to the European Commission to ban TCEP from all toys.

Moreover, we call for banning also the halogenated flame retardants TCPP and TDCP as it has not been demonstrated that these substances will be able to act effectively as flame retardants over the whole life time of the toys based on the proposed TDI values.
Introduction

ANEC and BEUC have been consulted by the European Commission on an opinion of the Scientific Committee on Health and Environmental Risks (SCHER) with regard to TCEP in toys\(^1\).

Tris(2-chloroethyl)phosphate (TCEP) is a chemical compound with flame retardant properties. The chemical is known to be toxic to reproduction and to be carcinogenic\(^2\).

TCEP is not being produced in the EU since 2001-2002 and the toy industry indicated to the European Commission that toy manufacturers in Europe are not using this substance anymore. However, exposure of children may continue when playing with toys that are imported to the EU. Moreover, exposure may take place due to TCEP which has been found in indoor and outdoor air, dust, drinking water, surface water and groundwater as well as food products\(^3\) which means that there is permanent environmental background pollution with TCEP.

With regard to the use in toys, European Commission has asked SCHER:

- If there are risks when TCEP is used in toys or parts thereof intended for use by children under 36 months or in toys intended to be placed in the mouth?
- If a specific value below the thresholds in the Classification and Labelling legislation would be appropriate, could SCHER suggest a specific limit value for TCEP?
- If SCHER thinks that there is a risk when TCEP is used in toys or parts thereof intended for use by children above 36 months\(^4\)?

In this position paper, ANEC and BEUC make recommendations to the European Commission how to regulate TCEP in toys in order to protect the health and safety of children.

**TCEP should be banned from all toys**

ANEC and BEUC welcome the opinion of SCHER on TCEP in toys as it points out clearly that TCEP should not be used in toys irrespective of the age specifications (below or above 36 months of age) as a safe limit value cannot be established (only a provisional TDI could be derived) and any additional exposure should be avoided as children are exposed to TCEP from several sources at levels corresponding to the provisional TDI.

Thus, the content of TCEP in toys should be below the level of detection using a sufficiently sensitive analytical test method. Using TCEP, which carcinogenic and endocrine disrupting, in toys is not justified taking into account that TCEP shows

\(^1\) Scientific Committee on Health and Environmental Risks (SCHER): Opinion on tris(2-chloroethyl)phosphate (TCEP) in Toys - Preliminary Opinion approved for Public Consultation, adopted for public consultation at its 15th plenary on 22 November 2011.

\(^2\) According to EU Regulation (EC) 1272/2008, TCEP is classified with regard to its effect on human health as carcinogen class 2 (suspected of causing cancer) and reprotoxic category 1B (may damage fertility). It may also be harmful of swallowed. It has not been classified for inhalation and dermal acute toxicity.

\(^3\) SCHER opinion, p.6.

\(^4\) The full mandate is available at: [http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_q_097.pdf](http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_q_097.pdf)
blooming effects, i.e. a very quick migration from inner parts to the surface and that TCEP is easily released from toys when children suck and chew the material. By licking on the toys, the chemical looses its flame retardant properties.

- From a consumer point of view it is completely unacceptable that the new Toy Safety Directive does not allow adopting specific requirements for toys that are intended for children above 36 months of age. The Toy Safety Directive therefore needs to be revised to allow also setting specific requirements for chemicals which are used in toys intended for children above 36 months of age. We urgently need a Comitology procedure allowing setting limits for all kinds of toys and all kinds of substances.

- In the meantime, an emergency measure based on article 13 of the General Product Safety Directive should be implemented⁵.

**TCPP and TDCP should also be banned from all toys**

Due to health concerns related to TCEP, is has been replaced with other halogenated flame retardants such as TCPP and TDCP primarily in the manufacturing of PUR foam⁶.

Similar to TCEP, the industry indicates that TCPP and TDCP are not used in the manufacturing of toys but that it could be present in imported toys.

Both substances have been registered by the December 2010 deadline to ECHA⁷.

ANEC and BEUC agree with SCHER that a read-across approach is warranted given the structural similarities between TCEP, TCPP and TDCP. SCHER states: "This would imply that considerations given for TCEP could be applied to its halogenated alternatives as well, if used in toy manufacturing". However, an explicit conclusion regarding TCPP and TDCP is missing, i.e. that no additional exposure from toys can be considered safe and that the substances should be avoided also in toys intended for use by children older than 3 years of age.

ANEC and BEUC consider that all 3 substances should be banned from toys.

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[http://apps.echa.europa.eu/registered/data/dossiers/DISS-9e9f57ed-ec54-00c5-e044-00144f67d031/DISS-9e9f57ed-ec54-00c5-e044-00144f67d031_DISS-9e9f57ed-ec54-00c5-e044-00144f67d031.html](http://apps.echa.europa.eu/registered/data/dossiers/DISS-9e9f57ed-ec54-00c5-e044-00144f67d031/DISS-9e9f57ed-ec54-00c5-e044-00144f67d031.html)
TCEP – A substance of Very High Concern not only in toys

TCEP had been added to the REACH candidate list in February 2012⁸. This shows the need to address these flame retardants also in other consumer articles, in particular products intended for children which are not toys and would therefore not be covered by a ban of TCEP, TCPP and TDCP in toys.

Several surveys show that TCEP can be found in a wider range of consumer products such as child car seats, baby carriers and in a tray of a high chair³.

Also, a study which looked on indoor air pollution in Austrian schools in 2008 showed that TCEP was found in rather high concentrations¹⁰. The study argued that there is a link between ascending levels of TCEP and descending levels of cognitive abilities of children. TCEP entered into the indoor air of schools mainly from construction materials such as acoustic protection ceilings.

Some jurisdictions such as the State of New York have already taken more action to better protect children as TCEP will be banned in toys and in child care products for children under the age of three from 2013 onwards¹¹.

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⁹ The Austrian Federal Agency published a study in 2010 on phthalates, organic tin compound and phosphor-organic flame retardants in articles for child care products, see: http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0284.pdf

¹⁰ Umweltbundesamt Austria: LUKI - Luft und Kinder - Einfluss der Innenraumluft auf die Gesundheit von Kindern in Ganztagsschulen; http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0181.pdf