BEUC COMMENTS ON RESTRICTING POLYCYCLIC AROMATIC HYDROCARBONS (PAH) IN CONSUMER ARTICLES

Contact: Sylvia Maurer – safety@beuc.eu
Ref.: X/2011/104 - 17/10/11

BEUC, the European Consumers' Organisation
80 rue d'Arlon, 1040 Bruxelles - +32 2 743 15 90 - www.beuc.eu
EC register for interest representatives: identification number 9505781573-45

Introduction

Consumer exposure to polycyclic aromatic hydrocarbons (PAH) from products has been a concern for many years as these substances are known to cause cancer and can easily and quickly be absorbed by the body through skin contact. There are also other routes of exposure such as ingestion and inhalation. PAHs are not intentionally manufactured and added but they enter the products if softener oils or carbon black are used. With good manufacturing practices the content of PAH can be reduced or even be avoided. However, tests from consumer organisations show that PAHs are found in a wide range of consumer articles including in products which are intended to be used by children.

Based on the REACH Regulation (entry 50 of Annex XVII), a number of PAH substances classified as carcinogenic, mutagenic or toxic to reproduction (CMR) are restricted for their use and marketing in extender oils and tyres. The restriction does not apply yet to other uses. This means in practice that as the new Toy Safety Directive allows the use of CMRs based on the threshold values of the CLP Regulation, toys may contain one thousand times more PAHs as are allowed in tyres.

Germany formally requested the Commission to propose a restriction for eight PAH substances in all articles that could be used by consumers, suggesting a general limit of 0,2 mg PAH/kg. Germany had filed an Annex XV dossier under REACH with the aim of restricting the use of these substances. As Germany sees urgent need for action, they are proposing a "fast track" procedure based on article 68 (2) REACH which would allow adding this substance quicker to Annex VII which restricts the production, placing on the market and use of certain hazardous substances, mixtures and articles. The EU Commission will only follow this "fast track" proposal if the risk to consumers can be sufficiently substantiated. Despite some uncertainties in exposure assessment of substances in consumer articles, estimations made of the exposure to PAHs under foreseeable conditions of use of toys, and childcare articles and other articles intended for the use of children, indicate that there may be cases when such an exposure leads to unacceptable risks in particular for children.

In this context, BEUC has been invited to a workshop which looks at restricting polycyclic aromatic hydrocarbons in articles. In this position paper, we are submitting written input to the workshop.

1. The scope needs to be extended beyond toys

Tests from consumer magazines have revealed in recent years that a whole range of articles contain polycyclic aromatic hydrocarbons (PAH) such as in the handle of children's bicycles, tools, toys, pushchairs, home trainers and other products which with consumers come in direct and frequent contact[1].

The eight PAHs mentioned in the dossier of the German Competent Authority submitted to the European Commission are classified as carcinogenic. The carcinogenic properties are based on a genotoxic mechanism which means that the substances have an effect on the DNA of humans. This effect is not limited to a certain development phase or age. For such substances a safe limit of exposure cannot be derived.

[1] A list of relevant tests can be found at the website of Stiftung Warentest.

BEUC, the European Consumers' Organisation
80 rue d'Arlon, 1040 Bruxelles - +32 2 743 15 90 - www.beuc.eu

It is therefore not reasonable that the Commission's proposal foresees only limiting the use of PAH containing materials in child products/childcare articles as also adults can be exposed to PAH.

- BEUC therefore suggests extending the use of the restriction to all accessible parts of consumer articles where a prolonged contact[2] to skin or ingestion is foreseeable. This is especially important for all kinds of handles, knobs and similar parts of consumer products (e.g. of tools, bicycles, fitness equipment, torches).

2. Single concentration limits for each PAH are preferable

The consultation document explains that there are two options of limiting PAH, either to set a single concentration limit for each type of PAH or to set a sum concentration limit for all PAHs.

- BEUC proposes setting a single concentration limit of 0.2 mg/kg for each of the eight PAHs due to two reasons. First, it is not possible to derive a safe limit due to the mentioned toxicological considerations. The concentration limit should therefore take into account the technical possibilities to reduce the PAH content in plastic and rubber materials and needs to take into account the state of the art of analytical methods. The German dossier showed that it is possible to produce consumer products with contents lower than 0.2 mg/kg for each single PAH. The analytical method used in the German GS label procedure allows determining concentrations in this order of magnitude safely. Second, there is no scientific evidence to derive different limit values for the eight PAHs because all are classified as carcinogenic.

3. The ALARA principle needs to be applied

PAHs are not chemically bound in plastic and rubber materials. Therefore they can be released if the product is in contact with other liquid or solid materials (including the human skin) or can gas out into indoor air. Currently no method is available to simulate the exposure through human skin and thus no systematic research exists whether the release is different from different polymer materials.
But even if such research would be available, according to the ALARA principle the exposure of carcinogens to humans should be limited as far as reasonable achievable. That means that also a small release from a polymer should be avoided if it is possible to reduce the PAH content in the polymer material itself.

- We propose not to set different limits for different kind of polymer materials (e.g. plastics, rubbers).

[2] In the GS mark scheme „prolonged contact" to the skin means a contact of more than 30 seconds.

BEUC, the European Consumers' Organisation
80 rue d'Arlon, 1040 Bruxelles - +32 2 743 15 90 - www.beuc.eu

4. Test method of the GS mark could be used

PAHs are detected in a wide range of products (including nutrition) for a long time. It is not an analytical problem to determine concentrations well below 0.2 mg/kg. However, analysing a wide range of consumer products requires an affordable method. The method used for granting the German Approved Safety mark (GS – Geprüfte Sicherheit) has been used to analyse thousands of products and proofed to be sound and affordable. The description of the method is available on www.zls-muenchen.de/de/left/aktuell/pdf/zek_01_2_08_pak_verbindlich_engl_090204.pdf.

- We therefore would agree using this method also at EU level for determining PAHs in consumer products.

END

BEUC, the European Consumers' Organisation
80 rue d'Arlon, 1040 Bruxelles - +32 2 743 15 90 - www.beuc.eu