PFAS SURVEY

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Chapter 1: Information on the Organisation

Please start by providing some information on your organization

Environmental or consumer NGO

Please characterise the stakeholders you represent (e.g. number of companies, national, EU-wide, international):

BEUC, the European Consumer Organisation is the Brussels-based federation of 43 independent national consumer organisations from 31 European countries (EU, EEA and applicant countries). In close cooperation with our members, we strive to promote, defend and represent the interests of consumers in the development and implementation of European Union policies.

Please give some information, why your organisation is affected by / has interest in the envisaged restriction:

PFASs are a family of greaseproof, waterproof and nonstick industrial chemicals used in hundreds of consumer products, including cosmetics, food packaging, and textiles. PFASs are also highly persistent synthetic chemicals, some of which have been associated with cancer, developmental toxicity, immunotoxicity, and other health effects.

Beyond a few well-studied compounds such as PFOS and PFOA as well as some longer-chain analogues, little is known about most PFASs, including their chemical structures, properties, and toxicological profiles. Research undertaken to date however indicate that short-chained PFASs can also result in adverse human health and environmental effects, while higher amounts could be needed to achieve equivalent surfactant action.

BEUC therefore welcomes the envisaged restriction that would contribute to ensure a high level of protection for all consumers, including vulnerable groups, such as children, pregnant and breast-feeding women, and the elderly.

Chapter 2: Relevance of fluorinated compounds

What are the main uses of fluorinated substances in your sector?

Fluorinated substances are used in a wide range of consumer products, for example to treat the surfaces of clothing and other consumer textiles, shoes, and carpets. Fluorinated substances may also be used in impregnation agents for paper, photo paper, paints, waxes, waterproofing sprays, in cleaning agents, cosmetics and in firefighting materials. Other uses include oil-repellent and heat-resistant food packaging, such as microwave popcorn bags, fast food wrappers, and pizza boxes.
Are they used as short chained PFASs (the C4-7 PFASs itself)?

Yes

Are they used as polymeric compounds (e.g. fluorotelomers etc.)?

Yes

Please indicate (as far as you can), which PFASs are relevant for the sector (you can address different levels, e.g. chemical groups, generic descriptions or list specific Substances by names, CAS-No. etc. Please separate by (,)

The European Commission database for information on cosmetic substances and ingredients (CosIng) currently list several substances potentially relevant to the envisaged restriction. A simple search on the term ‘perfluor’ thus yields more than 85 results; at least some of these ingredients are short-chain PFASs, e.g. perfluorooctyl triethoxysilane, methyl-perfluoroisobutyl ether, octafluoropentyl methacrylate.

See further attached document (xls) for additional evidence on PFASs relevant to other consumer product sectors, such as food packaging and textiles. This evidence was produced through independent laboratory testing sponsored by European consumer organisations.

Chapter 3: Evaluation of the restriction proposal

How do you evaluate the general need to continue the use of PFASs?

Global concern about the impacts of PFASs on human health and the environment is mounting. More than 200 scientists from 38 different countries have thus signed the so-called Madrid Statement which highlights the potential harm of PFASs. The statement concludes with a call for international cooperation on limiting the production and use of PFASs and for the development of safer non-fluorinated alternatives.

Despite these concerns, most PFASs can be used in consumer products with little control, including in cosmetics that are designed to be applied directly on the skin. At the same time, the wide-spread use of fluorinated substances in consumer goods often leads to expectations that many everyday products should exhibit enhanced stain resistance and oil/water repellence. For some products, such as high-altitude mountaineering clothing, these functions are indeed essential, and may at present require the use of fluorinated substances. For many other consumer products such functions are either not essential or could be achieved by using non-fluorinated alternatives. Encouraged by the Greenpeace Detox campaign, several global textile manufacturers have for example pledged to end the use of PFASs, while many retailers, such as Danish Coop are eliminating fluorinated substances from their own brands. (see e.g. http://www.greenpeace.org/archive-international/Global/international/publications/detox/2017/PFC-Revolution-in-Outdoor-Sector.pdf or https://chemicalwatch.com/49963/danish-coop-to-phase-out-dirty-dozen) Given current uncertainties about possible adverse effects on the environment and consumer health, the routine use of PFASs in everyday consumer products therefore appears highly problematic.
Do you agree with the following statements?

Please choose the appropriate response for each item

PFASs are a high risk for the environment: **fully agree**

Uses should be restricted, even if no alternatives are available: **agree**

PFASs should be restricted in all consumer uses: **fully agree**

PFASs should be restricted in all professional applications: **N/A** (otherwise state agree explaining, we don’t know/not applicable for this question)

PFASs should be allowed in very specific applications with high relevance for the society: **agree**

If you agreed or disagreed to one of the statements above, you can now provide arguments for your position (you can e.g. describe applications that might qualify for such exemptions and give further reasoning):

Due to their chemical properties, PFASs are extremely persistent: they are inert to most natural breakdown processes and persist in humans and the environment for decades. PFASs have moreover been detected in humans and wildlife all over the world. Breast milk have for example been found to contain PFASs and is thought to be the primary source of exposure of these compounds for most infants (see e.g. Haug et al. Characterization of human exposure pathways to perfluorinated compounds. [https://www.ncbi.nlm.nih.gov/pubmed/21334069](https://www.ncbi.nlm.nih.gov/pubmed/21334069))

Against this background, use of PFASs should be strictly controlled and phased-out to the extent possible while support for the development of safer non-fluorinated alternatives needs to be increased. The evidence from our members’ comparative product tests tell a compelling story: across diverse product groups, fluorinated substances are present in some but not in all products. (See above) For example, in a 2017 test of food packaging, PFASs were found in some but not in all sampled products. More than half of the tested packaging materials were thus negative in the initial screening tests. (see [http://www.beuc.eu/press-media/news-events/harmful-substances-found-fast-food-packages-across-europe](http://www.beuc.eu/press-media/news-events/harmful-substances-found-fast-food-packages-across-europe)) The evidence provided by that study demonstrates that alternatives do exist. Moreover, neither price nor brands appear to be a decisive factor: for example, comparable cosmetic products with and without PFAS are often available under the same brand name.

For some applications, non-fluorinated alternatives may indeed currently not be available. In certain cases, such as e.g. implantable medical devices, time-bound exemptions could therefore be considered where a clear and justified need for continued use can be demonstrated. To encourage the development of safer alternatives, a strong market signal is however needed through an ambitious restriction of all PFASs, only exempting essential uses that are clearly justified and time-limited to achieve the goal of reducing use of PFASs in consumer products.
**What are main obstacles for substitution of PFASs?**

More than 3000 PFASs are, or have been, on the global market. Yet, most research and regulation continue to focus on a limited selection of rather well-known long-chain PFASs, particularly PFOS, PFOA and their precursors, with little information publicly available about the majority of PFASs. This situation creates problems for regulators to prioritise substances for regulatory scrutiny, for companies to switch to safer non-fluorinated alternatives, and makes it all but impossible for individual consumers to avoid PFASs that may harm their health.

An effective response to this situation demands that we target PFASs as a chemical group. Regrettably, the tendency over the past years has thus been for industry to replace PFOS and PFOA with very similar substitutes. While some shorter-chain PFASs indeed seem to be less bioaccumulative, they are still as environmentally persistent as long-chain substances or have persistent degradation products. Consequently, a switch to short-chain and other fluorinated alternatives may not reduce the amounts of PFASs in the environment. Further, because some of the shorter-chain PFASs are less effective, larger quantities may be needed to provide the same performance.

As highlighted in a recent study commissioned by the EU chemicals agency, strict regulations are critical drivers for industry to substitute hazardous chemicals (see https://echa.europa.eu/view-article/-/journal_content/title/reach-is-the-dominant-driver-for-substitution-more-action-is-needed). Rather than encourage manufacturers to move from one PFAS to the next, the envisaged restriction therefore needs to cover all short-chained PFASs. This would challenge manufacturers to innovate and develop more benign alternatives through materials innovation and green chemistry.

More transparency about the uses of PFASs in consumer goods is also essential in particular for products which consumers come in direct, close or regular contact with, such as bed mattresses or textiles. As PFOA has come under increased scrutiny some products are now advertised as PFOA-free; this however does not mean PFAS-free, and such communication is potentially misleading consumers – and downstream users/retailers who in our members experience often do not seem to receive sufficient information from their suppliers. Greater transparency about PFASs used in consumer goods will thus facilitate the identification and handling of exposure sources and enable suppliers, distributors and consumers to adopt a preventive approach and choose better alternatives. This would in turn reinforce incentives for industry to phase out the use of PFASs.

**If you want to provide any other aspect in regard to the envisaged restriction proposal, you can provide these aspects in the text box below or upload a document in standard format (word, PDF) below.**

**Eliminate PFASs from the Circular Economy**

The wide-spread use of PFASs in consumer products presents a pressing problem for EU chemicals policy, and not just on health and environmental grounds. Addressing these extremely persistent substances takes on a new urgency as the EU’s transition to a (more) circular economy begins to gain momentum.

In a circular economy, it becomes even more difficult to control and limit exposures to chemicals of concern such as PFASs. Increased recycling and reuse of products means that it can take decades to eliminate legacy substances from material cycles and waste streams: for example, research suggests that even after a complete ban on the use of bisphenol A in paper receipts, it will remain in recycled paper for up to 30 years (see https://www.eea.europa.eu/publications/circular-by-design/).
A true circular economy requires that toxic substances are absent as of their first use in consumer products. Better upstream management of PFASs and other substances of concern through greater reliance on grouping of chemicals and hazard-based standards is essential to detoxify the circular economy and to speed up the implementation of legislation meant to protect consumers. Continued use of PFASs is by contrast equivalent to kicking the proverbial can down the road and threatens to undermine consumer confidence in the circular economy. (See also http://www.beuc.eu/publications/beuc-x-2017-084_how_to_detoxify_the_circular_economy.pdf)

Analytical control of fluorinated substances

Given the size and diversity of the PFAS group, as well as the current analytical difficulties in distinguishing among individual substances, the envisaged restriction could benefit from implementing methods based on total content of organic fluorine (TOF). In response to concerns about the adverse impacts of fluorinated substances, the Danish Veterinary and Food Administration has for example set a recommended TOF limit for paper and board food packaging. The limit was deliberately set to discourage the use of fluorinated compounds. (For details, see: https://www.foedevarestyrelsen.dk/english/SiteCollectionDocuments/Kemi%20og%20foedevarekvalitet/UK-Fact-sheet-fluorinated-substances.pdf)

Feedback

We might have some follow up questions to specify your answers in more detail. Do you agree, that we contact you for a potential follow up interview?

Yes

In order to identify an improvement potential, we would like to use your feedback to this survey. Please provide your feedback in the text field below.
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