CTPA Recommendation on PFAS in Cosmetics

April 2021

What is the issue?

Per- and polyfluoralkyl substances (PFAS), when defined as any chemical bearing a CF_3- or CF_2- functional group, is an extremely broad chemical category encompassing substances which have very different environmental profiles.

The UK Government is investigating whether to take regulatory action on the PFAS group. In addition, the PFAS group is a priority topic within the EU Chemicals Strategy for Sustainability, and five EU Member States have proposed a broad-scope REACH Restriction on all PFAS substances.

On behalf of the UK cosmetics industry, CTPA has developed a recommendation on the use of PFAS in cosmetics which has been endorsed by its membership.

CTPA is the UK trade association representing companies involved in making, supplying and selling cosmetics and personal care products. As the voice of the UK industry, CTPA promotes best practice and advises companies about the strict legal framework for cosmetics as well as the safety of cosmetic products.

Background

PFAS substances have a very limited use in cosmetics, and the specific substances which were, or are, used have very different properties from those such as perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) which pose an unacceptable environmental risk. Suppliers and manufacturers carefully consider the ingredients used in cosmetic products from both a human and environmental safety perspective. Additionally, it is important to consider in which product types they are used, and whether these are removed directly into the water system, or into the bin; for example, make-up.

Prior to legislative or voluntary action, it is important that an unacceptable environmental risk is demonstrated for an individual substance, or all substances in a group. For example. voluntary action was taken on nonylphenol and ethoxylates in 2004 based on unacceptable risk shown by the PEC/PNEC and bioaccumulation potential.

As no unacceptable environmental risk has been demonstrated for all PFAS chemicals included in the broad PFAS group, the concern relates to persistence. However, there are many examples of substances which fulfil legislative persistence criteria – both synthetic and natural. For example, sand, wood, bone, coconut shells and more … Therefore, CTPA is concerned that banning very large groups of chemicals based solely on persistence, rather than risk, undermines the UK's scientific approach to chemicals management, harms innovation and reduces consumer choice with no benefit to the environment. In addition, not all substances within the PFAS group will have the same persistence properties.

CTPA, Cosmetics Europe and other chemical industry stakeholders will make it very clear to Government and stakeholders that banning substances is not justified when there is no evidence of harm to the environment or human health. In this specific case, the cosmetics industry rarely uses these ingredients and can use alternatives. But CTPA and the industry will oppose strongly in other areas any proposals to ban group of chemicals solely on the basis of persistence because that will stifle investment, innovation, efficacy of products harming business and consumers with no benefit to the environment or human health. Doing so would be wrong, particularly at a time when businesses need to recover after Brexit and Covid.

This recommendation proposed by CTPA is fully aligned with the approach taken by the European cosmetics industry, represented by Cosmetics Europe.

CTPA Recommendation

CTPA fully supports measures which reduce risks to the environment and human health by managing chemicals of concern. However, CTPA does not support regulatory action on chemicals based solely on persistence when a risk of harm to the environment has not been demonstrated.

The PFAS group includes a vast number of substances with very different environmental properties, including many substances which do not degrade to substances of concern and are not bioaccumulative. Demonstrating persistence of a chemical is not sufficient to demonstrate an unacceptable risk.

PFAS substances have a very limited use in cosmetic products and alternatives are available. As such, the UK cosmetics industry will not defend the use of individual PFAS substances in cosmetics, but does not agree with the scientific basis on which a ban is proposed.

Annex I – Further information about PFAS in cosmetics

PFAS substances have a very limited use in cosmetic products.

Examples of substances which were historically, or may still be to a small extent, used in cosmetics include fluoropolymers, polyfluoroethers and perfluorocarbons.

Fluoropolymers such as PTFE are widely acknowledged to not be of the same level of concern as other PFAS[1]. PTFE does not include reactive functional groups of concern, it is inert, non-bioaccumulative. It is biocompatible, with usage in some *in vivo* medical devices[2].

Modern manufacturing processes do not use PFOA in the manufacturing of PTFE[3].

Available ecotoxicological data on the very limited number of substances which were recently, or are, used in cosmetics shows that they do not have the same properties as, and are not precursors of, environmentally harmful PFAS. For example, PFAS that have longer chain lengths, can bioaccumulate or biomagnify, or have side chains of concern.

The data show the substances are inert, do not bioaccumulate and do not pose a hazard to species warranting a hazard classification under the Classification, Labelling and Packaging (CLP) Regulation[4].

[1] Ankley, Gerald T., et al. "Assessing the Ecological Risks of Per-and Polyfluoroalkyl Substances: Current State-of-the Science and a Proposed Path Forward." *Environmental Toxicology and Chemistry* (2020).

[2] Henry, Barbara J., et al. "A critical review of the application of polymer of low concern and regulatory criteria to fluoropolymers." *Integrated environmental assessment and management* 14.3 (2018): 316-334.

[3] Buck, Robert C et al. "Perfluoroalkyl and polyfluoroalkyl substances in the environment: terminology, classification, and origins." *Integrated environmental assessment and management* vol. 7,4 (2011): 513-41. doi:10.1002/ieam.258

[4] Publicly available REACH data on PFAS substances with limited use in cosmetics