

The restriction of fluoropolymers under REACH will hamper key EU strategic sustainability ambitions

On 7 February 2023¹, the European Chemicals Agency (ECHA) published the Annex XV REACH restriction report (and annexes) for per- and polyfluoroalkyl substances (PFAS) that has been prepared by 5 Competent Authorities from Denmark, Germany, the Netherlands, Norway, and Sweden. The restriction dossier proposes a near-total ban of all PFAS substances, including fluoropolymers.

The Fluoropolymers Product Group (FPG)² recognises the public and political concern about PFAS. FPG acknowledges concerns on losses to the environment during manufacture and on the fate of fluoropolymers at End of Life (EoL).

Provided below are FPG comments on the REACH restriction proposal:

- The REACH restriction dossier proposes a **total ban over time on the use of all fluoropolymers in all applications, without distinguishing between fluoropolymers and other PFAS**. The proposal makes limited reference of the fact that **fluoropolymers have very different toxicologic profiles to other PFAS substances**.
- **FPG believes that a total ban on fluoropolymers is not proportionate**. Given their benign hazard profile, **a general derogation for fluoropolymers should be provided in the proposal**.
- Fluoropolymers are non-toxic, not bioavailable, non-water soluble and non-mobile molecules and are deemed as such to have **no significant environmental and human health impacts**.
- **FPG believes that concerns of persistence raised in the restriction proposal can be appropriately managed through the implementation of responsible manufacturing and EoL risk-management practices**. This would be a proportionate regulatory approach which recognises their benign hazard profile and importance to the EU economy and society.
- FPG member companies continue investigating and developing R&D programs for the advancement of technologies allowing for a transition away from using PFAS-based polymerization aids during fluoropolymer production. However, during this transition, **it may be necessary to continue using fluorinated polymerization aids until non-PFAS polymerization aids are developed. Therefore, relevant derogations for fluoropolymers should be provided**.
- **Sectors in which fluoropolymers are used today are not included in the time-limited derogations and are targeted for immediate ban** (18 months after entry into force of the restriction). Examples of missing applications include, the chemical process industry including chloro-alkali processes, batteries for EV, water and atmosphere purification, water electrolysis, energy/hydrogen storage, applications in pharmaceutical manufacturing equipment, electronics, aerospace, military & defense, transportation, semiconductor manufacturing and high-end niche applications.

¹ The proposal published 7 February was prior to the conformity check process at ECHA. Having passed conformity check, the PFAS REACH restriction proposal was officially published on 22 March, 2023.

² The Fluoropolymer Product Group (FPG) of PlasticsEurope represents Europe's leading fluoropolymer producers and experts

- Regarding the **periods for time limited derogations, these are not substantiated by a strong evidence base, and in many cases will be insufficient.** The derogations do not seem to take in to account that applications may have to be redesigned from the bottom up or that in order to meet stringent standards requirements (e.g. safety standards) testing on potential alternatives will need to be undertaken to ensure suitability. We encourage the ECHA committees to take into consideration stakeholder input to develop an opinion that offers realistic and well substantiated periods of derogation.
- Fluoropolymers are used in critical applications that help deliver strategic EU and UN climate objectives and are an enabler of the European Green Deal, the Chips Act, Hydrogen Strategy, and Sustainable and Smart Mobility Strategy. The proposed restriction creates **general uncertainty that would undermine investment decisions and innovation in these and other important EU ambitions.**
- The dossier submitters state that a move away from using fluoropolymers to alternative materials in many applications can be made. The industry does not share these views about alternatives and whether they can provide the same combination of functionality and performance as fluoropolymers.^{3&4}
- **The lack of recognized alternatives could open the door for regrettable substitution** to alternatives that do not perform at the same specification as fluoropolymers, may be potentially hazardous, less durable and as such would mean applications are unable to meet stringent safety standards.

Overall, the restriction proposal significantly underestimates the breadth of use and importance of fluoropolymers use in key applications, their benefits to society, their instrumental role with regards to the EU ambitions in climate and energy, and economic growth, enabling quality of life for European citizens as well as the lack of viable alternatives to replace them.

FPG is committed to providing further data during the ECHA public consultation and throughout the restriction process and we look forward to continued engagement with all stakeholders.

About fluoropolymers and the Fluoropolymers Product Group

The [Fluoropolymers Product Group](#) (FPG), part of Plastics Europe represents Europe's leading fluoropolymer producers and experts and its members are 3M, AGC, Arkema, Chemours, Daikin Chemical, DuPont, W. L. Gore & Associates, Gujarat Fluorochemicals, Honeywell, and Solvay.

³ <https://www.esaknowledgebase.com/wp-content/uploads/2022/03/ESA-Position-Statement-on-proposed-PFAS-regulation-March-2022-1.pdf>

⁴ <https://www.fpp4eu.eu/benefits-applications/>