Position Paper: Why Europe Must Take a Differentiated Approach to Fluoropolymers

When regulating PFAS, the EU should adopt a risk-based approach rather than banning an entire group of substances, writes the Secretary General of the CDU Economic Council. Fluoropolymers are not only economically necessary but also vital to survival.

WS Wolfgang Steiger

Europe faces a difficult challenge: effectively protecting public health and the environment from hazardous substances. The EU is therefore currently pursuing comprehensive chemical regulation with the goal of restricting nearly the entire PFAS group of substances under the REACH Regulation.

In 2023, the European Chemicals Agency (ECHA) submitted a restriction proposal for the PFAS group, which comprises more than 10,000 substances. This proposal was based on dossiers submitted by Germany, the Netherlands, Denmark, Norway, and Sweden. By the end of 2026, ECHA is expected to complete its scientific assessment and submit a regulatory proposal to the European Commission. The Commission will then present a concrete draft regulation.

Therefore, now is the time to discuss the merits of blanket bans in the PFAS debate. Fluoropolymers represent a small group within the PFAS family. They

differ significantly in terms of their properties and risk profiles. As high-molecular-weight materials, they are neither soluble nor toxic nor volatile, nor are they bioaccumulative.

At the same time, fluoropolymers are essential for many industries in Germany and Europe—ranging from pharmaceuticals and medical technology to the computer industry, renewable energy, and mobility, as well as the food industry, the electrical industry, and mechanical engineering. In medical technology, for example, they are needed for the manufacture of heart valves, stents, and a wide variety of other implants. Fluoropolymers are therefore not only economically necessary but also vital.

A ban would have drastic consequences for entire industries, which would then be at risk of relocating. Since the PFAS regulatory process has been ongoing for several years now and its outcome is uncertain, this is already happening. Modern technologies in the pharmaceutical, battery, and electric vehicle sectors are already being relocated to China or India.

One of the main criticisms of PFAS is the emissions from past manufacturing processes. Another concern is PFAS that enter the environment at the end of their life cycle. There are now technically sound solutions for both issues: Fluoropolymer manufacturers in Europe have committed to significantly reducing emissions as part of their production programs. Waste incineration is also considered a safe end-of-life process. Its role as a sink for PFAS was impressively demonstrated in a real-world, real-time study.

In addition, there are pilot projects for chemical recycling—the so-called upcycling of fluoropolymers. The process was developed in Germany and tested on a pilot scale over several years. Corresponding plants are now being built on a production scale. Fluoropolymers produced from upcycled monomers have a carbon footprint that is reduced by approximately 80 to 90 percent. The process is therefore significantly more climate-friendly.

The European Commission should therefore exclude fluoropolymers from the proposed PFAS restriction procedure. There are undoubtedly real risks associated with some chemicals in the PFAS group—for example, leachable components from inexpensive clothing that pose a threat to the environment and human health. Overall, the restriction process should follow a risk-based approach and be guided by the actual risks, rather than imposing a blanket ban on an entire group of substances and, as the saying goes, throwing the baby out with the bathwater.

When dealing with PFAS, Europe therefore does not need a one-size-fits-all regulatory approach. Rather, it needs a regulation that takes into account scientific findings, actual risks, and the significance of individual substance groups. Only in this way can environmental and health protection be combined with innovation and industrial strength.

This viewpoint does not necessarily reflect the opinion of the editorial staff.
