

European Chemicals Agency
P.O. Box 400
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Finland

Winterthur, 2nd August 2023

Consultation on a proposed restriction on the manufacture, placing on the market and use of per- and polyfluoroalkyl substances (PFAS)

Dear Sir or Madam

The purpose of this letter is to comment on the public consultation on a proposed restriction on the manufacture, placing on the market and use of per- and polyfluoroalkyl substances (PFAS).

PFAS, especially polymeric PFAS such as PTFE or PFPE, exhibit a unique combination of properties. In addition to their resistance to high temperatures, oxygen (non-flammable), chemicals such as acids or bases, solvents or corrosion, they exhibit exceptional tribological behavior. A low coefficient of friction and low surface tension provide their lubricating properties. Coupled with low outgassing, low gas permeation and the above-mentioned resistances, these PFAS lubricants are the only sufficient solution if harsh conditions such as high temperatures, high pressures, or aggressive chemicals are applied, thereby ensuring protection, energy efficiency, durability and safety.

Besides some PFAS carrier solvents being used in the application of PFAS lubricants, fluoropolymers such as PTFE and PFPE are of great importance. They are used for the lubrication of bearings and thread seals where standard lubricants are not sufficient. The main application areas are the automotive industry (or related industries such as aerospace, etc.) where lubricants can reduce wear and tear on engine parts but must cover a high temperature range, the chemical industry with a number of plants operating under extreme physical ($T > 250^{\circ}\text{C}$; $p > 250\text{ bar}$) and chemical conditions (presence of oxygen or solvents such as DCM), the electronics sector, especially semiconductor manufacturing, which requires extremely clean conditions, and the pump and valve industry, which supplies all industries that need to handle liquids and gases, thus in need of PFAS lubricants to protect the machinery and equipment from corrosion, rust and abrasion.

It is important to emphasize that PFAS lubricants are only used where other lubricants cannot provide the combination of safety, functionality and durability. As a result, they are expensive and generally avoided. Given the variety of applications where PFAS lubricants are critical, the entire industry is affected at some point in the supply chain. The multiplicity of links in the supply chains makes it impossible to predict the impact on European industries if the ban comes into

force without sufficient alternatives having been developed. As the variety of processes and equipment in which PFAS lubricants are used is immense and each application with its specific requirements will have to develop or at least test its alternatives, the industry could be overwhelmed, especially small and medium enterprises. Therefore, a derogation period of 12 years is of utmost necessity.

Currently, only limited alternatives are available. PFPE as the main representative have none, or they rely on other PFAS. Predicting the development for the large number of individual applications is impossible. This creates uncertainty in the European market, which prevents investment in the EU. Should the exemption expire without comprehensive alternatives, European producers will suffer in competition with industries without comparable restrictions and Europe as a business location will lose its attractiveness for companies and employers.

We thank you for your consideration of our concerns and remain at your disposal for any questions.

Kind regards

**Union of the Swiss
Lubricants Industry**



Matthias Baumberger
Director