

FPG Statement on Polymers of Low Concern (PLC)

The Fluoropolymer Product group has not previously stated that the OECD endorsed fluoropolymers as Polymers of Low Concern (PLC). However, it has stated that research shows that 96% of commercial fluoropolymers do meet the criteria for polymers of low concern (PLC) if you consider the definition criteria the OECD Expert Group on Polymers discussed¹ in its work on the identification of polymer characteristics that may correlate to health or (eco)toxicological concerns. OECD states that this work “supported the contention that polymers meeting low concern criteria have insignificant human health or environmental impacts, which in turn, supports reduced regulatory requirements for these polymers.”

In the years since the OECD Expert Group on Polymers coined the phrase “Polymer of Low Concern” and the identified criteria, the weight of scientific evidence has confirmed the properties of a polymer that are useful in its hazard assessment. These PLC criteria have been used by regulatory authorities to facilitate polymer hazard assessment that identifies low-risk polymers that in turn assist in prioritising regulatory activity on higher-risk substances. Note that jurisdiction-specific requirements with respect to fluoropolymers are not a conclusion of hazard, but a recognition that more time and information was needed to ensure that certain molecular characteristics would not contribute to degradation potential². PLC criteria were not established as a comprehensive Life Cycle Assessment Tool but are useful to assess the potential for in-use hazards.

Consistent with these accepted properties, the vast majority of fluoropolymers^{2,3} do not display any characteristics of high hazard polymers, which has been demonstrated by data in regulatory submissions and peer-reviewed literature. Fluoropolymers can be safely and sustainably managed, making an important contribution to the European Union’s economy, climate and digital ambitions, and circular economy objectives. FPG members are aware of the legitimate questions and concerns regarding emissions during fluoropolymer manufacturing and disposal. We live up to our responsibility and measure ourselves against the best possible emissions control. In September 2023, FPG released its manufacturing program aimed at minimizing non-polymeric PFAS emissions in our manufacturing.

Our mission is to promote the innovation, safe use, responsible manufacturing and stewardship of fluoropolymers as well as serve as the voice for our industry, advocating for a balanced regulatory environment to manage risks while ensuring the European industries which rely on fluoropolymers remain competitive and sustainable in the long term.

¹[OECD] Organisation for Economic Co-operation and Development. 2009. Data analysis of the identification of correlations between polymer characteristics and potential for health or ecotoxicological concern. OECD Task Force on New Chemicals Notification and Assessment, Expert Group Meeting on Polymers; 2007 Mar; Tokyo, Japan. Paris (FR).

²Henry et al., 2018. Integr Environ Assess Manag 2018:316-334

³Korzenowski et al., 2023. Integr Environ Assess Manag 2023:326-354