

March 2026

Per- and polyfluoroalkyl substances (PFAS)

The use of perfluorooctane sulfonates (PFOS) has already been largely banned since 2006 and that of perfluorooctanoic acid (PFOA) since July 2020.

In February 2023, a proposal prepared by the Netherlands, Denmark, Germany, Norway and Sweden for a European PFAS restriction was published by the European Chemicals Agency (ECHA). The aim of the proposal is to reduce PFAS emission into the environment and make products and processes safer for people.

The European Commission is still working on a decision on this proposal.

Besides still ongoing evaluation from ECHA of restrictions of the entire PFAS group in different sectors the Commission Regulation (EU) 2024/2462 amending Annex XVII of REACH Regulation (EC) No 1907/2006 as regards undecafluorohexanoic acid (PFHxA), its salts and PFHxA-related substances was published in September 2024.

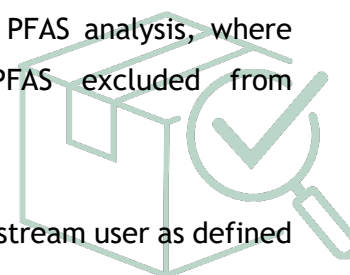
This restriction bans the sale and use of PFHxA in a concentration equal to or higher than 25 ppb for the sum of PFHxA and its salts, or 1000 ppb for the sum of PFHxA-related substances, measured in homogeneous material in - among others - paper and cardboard used as food contact materials from 10 October 2026.

Furthermore, PPWR (EU) 2025/40 chapter 2, article 5.5 requires that “from 12 August 2026, food-contact packaging shall not be placed on the market if it contains per- and polyfluorinated alkyl substances (PFAS) in a concentration equal to or above the following limit values to the extent that the placing on the market of packaging containing such a concentration of PFAS is not prohibited pursuant to another Union legal act: (a) 25 ppb for any PFAS as measured with targeted PFAS analysis (polymeric PFAS excluded from quantification);

(b) 250 ppb for the sum of PFAS measured as the sum of targeted PFAS analysis, where applicable with prior degradation of precursors (polymeric PFAS excluded from quantification);

and (c) 50 ppm for PFASs (including polymeric PFAS);

if total fluorine exceeds 50 mg/kg the manufacturer, importer or downstream user as defined



respectively in Article 3, points (9), (11) and (13) of Regulation (EC) No 1907/2006 shall, upon request, provide to the manufacturer or the importer as defined respectively in Article 3(1), points (13) and (17), of this Regulation proof of the quantity of fluorine measured as content of either PFAS or non-PFAS in order for them to draw up the technical documentation as referred to in Annex VII to this Regulation”.

Discussions within industry and EU Commission are ongoing how these limits should be analysed and confirmed. The compromise that emerges is a 3-step-approach to demonstrate compliance with the PFAS restriction set out in the PPWR, that should be considered both sufficient and proportionate to the legal requirements outlined in the regulation:

- 1) In a first step an analysis of Total Fluorine (TF) in the packaging material is performed. If TF is below 50 ppm, the packaging would be considered compliant with PPWR Article 5.5.
- 2) If TF is above 50 ppm, a Total Organic Fluorine (TOF) test has to be performed to check if the fluorine comes from organic sources.
- 3) If TOF shows presence of organic content, targeted screening of PFAS needs to be performed. (limit targeted PFAS 25 ppb, limit sum of targeted PFAS 250 ppb)

This approach shall be included in future guidance and FAQ documents as a recommendation.

PFAS related measurements are already routinely performed on our paper and cartonboard products. These clearly demonstrate that PFAS are not intentionally added, and that food packaging articles compliant with the PPWR can be made from cartonboard produced at MM BOARD & PAPER mills.

Furthermore, we are performing an extensive monitoring program to analyse the total (organic) fluorine on our entire product portfolio.

Exemplary total (organic) fluorine measurements on our cartonboard products show results well below 50 ppm and no further testing is necessary to prove compliance with PPWR. We do not share test results, as these are monitoring reports and single results cannot show general compliance with the limits set in PPWR.

Due to ubiquitous presence of PFAS marginal traces are unavoidable and may be detectable in the products.

On behalf of
MM BOARD & PAPER

Dr. Sigrid Gerold
Head of Group Product Safety & Quality

