

Subject: PPWR – Heavy metals and PFAS
Issued: May 2026

The Packaging and Packaging Waste Regulation, or PPWR, was published on 22 January 2025 and came into force on 11 February 2025. After a transitional period of 18 months, most of the provisions of the PPWR will take effect.

In addition to the restrictions on heavy metals (lead (Pb), cadmium (Cd), mercury (Hg) and hexavalent chromium (CrVI) already existing in Directive 94/62/EC, limits for the concentration of PFAS must now be observed for food packaging from 12 August 2026.

- The sum of the concentrations of lead, cadmium, mercury and hexavalent chromium resulting from substances present in packaging or packaging components shall not exceed 100 mg/kg
- From 12 August 2026, food packaging shall not contain per- and polyfluoroalkyl substances (PFAS) in a concentration exceeding the following limits,
 - 25 ppb for any PFAS as measured with targeted PFAS analysis (polymeric PFAS excluded from quantification);
 - 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
 - 50 ppm for PFASs (including polymeric PFAS);

Xeikon is aware of the presence of a small amount of a non-migratable, non-extractable fluorine containing component in our toners, which is falling under the broad OECD definition. It is added for negative charging purposes and is present in all Xeikon toners (QB-I, QA-P, QB-IC, QB-CH, QA-CD, QA-SR, QB-T, QBE, QC and corresponding SPOT colours). Xeikon can state it does not use any compound in our toner formulations that matches the following definition : "contains $(CF_x)_n$, ($x=2$ or 3 and with $n>1$)", and this fluorine compound is also irreversibly chemically linked to a TiO_2 particle. Additionally, the fluorine containing component does not fall under the USA EPA definition of PFAS (40 CFR Section 705.3), nor does it fall under the 'designated fluorinated chemical' definition of the Australian AICIS.

Xeikon has performed targeted analysis for this fluorine component, as requested by the 25 ppb PPWR criteria, but no extractable fluorine could be detected. Additionally, the enforcement for the PPWR PFAS-criteria as described in the Guidance document for Regulation (EU) 2025/40 of 31.03.2026, is assessed by testing the total package against the 50 ppm limit for total fluorine. This limit will always be met by printing on a Fluor-free substrate of at least 20 gsm with a total of 150 % toner coverage. Label substrates are normally thicker and coverages lower creating much lower ppm values bases on the label used.

Additionally, IDERA inks & flushes & primers, PantherCure UV, PantherCure UV LED, PantherCure XT-D and PX-Cure inks & flushes do not contain any intentionally added fluorine containing compounds.

This statement also confirms that Xeikon toners (QB-I, QA-P, QB-IC, QB-CH, QA-CD, QA-SR, QB-T, QBE, QC and corresponding SPOT colours), IDERA inks & flushes & primers, PantherCure UV, PantherCure UV LED, PantherCure XT-D and PX-Cure inks & flushes are not manufactured by intentionally adding hazardous metals belonging to the group of cadmium (Cd), lead (Pb), mercury (Hg) and hexavalent chromium (Cr VI), or raw materials known to contain them. These metals might be present as industrial impurities. The total concentration will not exceed 100 ppm based on analytical tests and information provided by our suppliers. The content meets also the limit defined in TPCH (Toxics in Packaging Clearing House – previously CONEG) Regulations in the United States.

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