

PACKR8 RESOURCE GUIDE

PFAS and other restricted substances under PPWR.

Article 5 substance restrictions in plain terms: heavy metals, PFAS, and the moving target of additions.

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01 / What Article 5 restricts.

Article 5 of PPWR sets concentration limits for specific hazardous substances in packaging. The limits apply to the packaging itself, regardless of whether the substance migrates into the contents in normal use. The European Commission can add to the list through delegated acts; the list as adopted in 2025 is explicitly described as a starting point.

Two restrictions are headline. Total heavy metal content (lead, cadmium, mercury, hexavalent chromium combined) at 100 mg/kg, carried over from the old directive but now with EU-wide enforceability. PFAS restrictions in food contact packaging, on a phased schedule, with the goal of eliminating intentionally added PFAS by 2026 to 2028 depending on packaging type.

02 / Heavy metals at the historical limits.

The 100 mg/kg limit on the four heavy metals is the same number that has been in the Packaging Directive since 1994. What changes under PPWR is enforceability and traceability. The figure must be substantiated for every packaging unit, supported by supplier declarations and (for higher-risk substrates such as recycled paper or coloured plastics) by analytical testing.

Recycled content streams are the practical risk area. Old printed paper recycled into new packaging can carry heavy metal residue from legacy inks. PET and HDPE from mixed waste streams can contain pigment residue from coloured precursor materials. Suppliers who do not declare are typically operating without the data.

03 / PFAS and food contact.

PFAS (per- and polyfluoroalkyl substances) have been used in food contact packaging for grease and water resistance, especially in paper and board for fast food, baked goods, and microwave applications. PPWR phases them out: intentionally added PFAS in food contact packaging is banned from 2026 for most categories, with limited extensions for specific applications.

The phase-out is intentionally added PFAS. Trace presence from environmental contamination is treated separately and held against migration limits in the food contact regulations rather than against Article 5 directly.

Producers should expect to see supplier declarations restating PFAS-free status, plus migration test reports for higher-risk applications (paper-based packaging in direct contact with greasy food, for example).

04 / Substances of concern flagged for restriction.

The Commission has flagged a longer list of substances under review for future restriction. Producers tracking the regulation should treat these as substances to design out now rather than wait for the implementing act:

- Bisphenols (BPA, BPS, BPF) in food contact applications, particularly thermal paper receipts and inner coatings of metal cans.
- Phthalates as plasticisers in PVC and certain elastomeric components.
- Ortho-phthalates in food contact applications.
- Mineral oil aromatic hydrocarbons (MOAH) migrating from recycled paper.
- Specific azo dyes used as colourants in plastic and paper packaging.

05 / Migration testing in practice.

Article 5 sets concentration limits in the packaging. The Food Contact Materials Regulation (EU) 1935/2004 sets migration limits for the substance moving into the food. The two regimes apply in parallel.

Migration testing is done under the test conditions in EU 10/2011 (for plastics) and equivalent rules for other materials. The test simulates worst-case storage and use conditions: temperature, contact time, food simulant. Results either meet or fail the migration limit.

Producers commissioning migration tests should demand the test method, simulant, and conditions on the report, not just the number. Auditors check that the test conditions match the actual product use case.

06 / Supplier evidence chain.

An audit-ready evidence chain for restricted substances has four parts. Supplier declaration of substance status (heavy metal levels, PFAS-free statement, restricted-substance absence). Test reports where applicable, with method and conditions. Material safety data sheets where the substrate carries one. A record of which packaging units sourced from which supplier batches over which periods.

Without that fourth part (the time-bound supplier-to-SKU mapping) the producer cannot prove that the spec at signing was honoured by the production runs the Declaration of Conformity covers. That is the gap auditors press on first.

07 / Frequently asked questions.

What is the heavy metal limit under PPWR Article 5?

100 mg/kg combined for lead, cadmium, mercury, and hexavalent chromium. Same as the old directive but with EU-wide enforceability.

When does the PFAS ban start?

From 2026 for most food contact packaging categories, with limited extensions to 2028 for specific applications. The ban applies to intentionally added PFAS.

Are bisphenols banned under PPWR?

Not yet under Article 5, but flagged for restriction and already under tighter food contact rules. Treat as a substance to design out.

Do I need migration testing for every packaging unit?

Not for every unit, but for representative product / packaging combinations covering the worst-case use conditions. Tests are valid as long as the spec does not change.

08 / About PackR8.

PackR8 is the packaging compliance platform for European producers preparing for PPWR and EPR. One source of truth for packaging data, with PPWR Declarations of Conformity, EPR filings, and audit evidence generated automatically from your records.

We started PackR8 because the same data problem was breaking the same teams every year. Smart sustainability leads with real strategies, stalled by packaging data that lived in eleven tabs of a spreadsheet maintained by someone in another country.

PackR8 fixes that. One packaging record per SKU. Full version history. Evidence pinned to every claim. Role-aware views for sustainability, packaging, and compliance teams. From that foundation, Declarations of Conformity, EPR filings, and audit responses become outputs rather than annual fire drills.

Talk to us.

The person you book a demo with is one of the team that built the platform. No SDR. No discovery calls. No funnel. Just a thirty-minute conversation about your packaging programme, and an emailed quote afterwards if it makes sense to keep going.

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