PACKR8 RESOURCE GUIDE

PPWR recyclability assessment under Annex II.

How A, B, and C grades are assigned, what gets a packaging unit downgraded, and the 2030 ban on grade C.

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01 / Why grade C disappears in 2030.

PPWR Article 6 sorts every packaging unit into grade A, B, or C based on how recyclable it is at scale within the EU. From 2030, grade C packaging cannot be placed on the market. From 2038, grade B becomes the disqualified tier and only grade A remains. The point is to use the regulation to retire formats that the existing infrastructure cannot recycle.

Producers who treat 2030 as far away will find the redesign cycle is not. Mould tooling, supplier qualification, and shelf-life testing for a packaging change typically take 18 to 36 months. The packs you ship in 2028 are the ones the regulator is going to look at on day one of the ban.

02 / How grading works in practice.

The grading methodology lives in Annex II and is harmonised with EN 13430:2004 plus the Design for Recycling implementing acts that the European Commission is still adopting as of 2026. Each packaging unit is scored against three things: separability of components, recognisability by the sorting infrastructure (mainly NIR), and compatibility with the recycling stream the material is meant to enter.

Grade A means the pack runs through existing sorting and recycling without manual intervention and produces a usable secondary material. Grade B means it can be recycled but with detrimental effects on the recyclate quality or yield. Grade C is everything else: incompatible labels, blocking colorants, multi-layer constructions that cannot be separated, or formats below the size threshold sorters can capture.

03 / What gets a pack downgraded.

Most grade B and C downgrades come from a small set of design choices that converters and brand teams have been making for decades.

- Carbon black and other dark pigments that NIR sorters cannot read. The pack is invisible to the sorting line and ends up in residual waste.
- Direct printing on the polymer with inks that contaminate the recyclate.
- Full-sleeve labels in PET shrink film over a PET bottle. The sorter sees PVC or PETG and rejects the bottle.
- PVC closures or barriers in an otherwise PET pack.
- Multi-layer flexible films that cannot be separated by current technology.
- Components below the 5 cm minimum dimension threshold sorters can capture, such as small caps and seals.
- Adhesives that do not release in the wash step, leaving label residue on the flake.

Each one of these is fixable. Migrating from carbon black to detectable dark pigments preserves the brand cue while keeping NIR detectability. Switching a PET shrink sleeve to a PE-friendly version

moves the bottle from C to A.

04 / Multi-material packaging.

Packs that combine multiple materials are graded on the dominant material if the others are below 5 percent by weight and physically separable. If the materials cannot be separated by the consumer or by the recycling line, the pack is graded against its weakest component, and most of the time that means grade C.

This catches a lot of food and personal-care packaging built as plastic-aluminium laminates, paper-plastic pouches, or plastic structures with metallised barrier layers. Grade A is achievable by switching to mono-material structures, even if it means slightly higher film weight or different oxygen barrier strategies.

05 / Design for Recycling implementing acts.

Annex II is the framework. The detail is in the Design for Recycling implementing acts that the European Commission is publishing on a rolling basis. Each implementing act sets the technical thresholds for one material family: PET, HDPE, PP, paper-based, glass, metal.

These acts include lookup tables. For PET, for example, the act will state which colorants are detectable, which label adhesives release in alkaline wash, which closure resins are compatible. Producers can read straight off the table and predict what grade their pack will receive.

Two practical consequences. First, your design team needs to track these acts as they appear, because each one tightens what counts as grade A. Second, your packaging records need to capture the specific colorants, adhesives, and label resins per SKU so that a future reassessment runs against current data, not what was specified in 2024.

> Reassessment is not optional. When an implementing act updates the criteria, packaging that was grade A under the old criteria can fall to B or C under the new ones. The producer is responsible for re-grading and updating the Declaration of Conformity. Producers without per-SKU material data cannot do this; they end up resubmitting whole product lines.

06 / How to keep grade A.

The path to keeping packaging at grade A across the decade is roughly the same in every product category. Six things help.

- Move to mono-material wherever the technical envelope allows.

- Audit every component (label, sleeve, adhesive, closure, ink) against the relevant Design for Recycling implementing act.
- Switch carbon black for NIR-detectable pigments.
- Specify wash-release adhesives on labels that stay attached during fill.
- Eliminate full-sleeve labels in non-matching polymers.
- Capture per-SKU material data in a system of record so reassessment is a reporting query, not a project.

07 / Frequently asked questions.

When does grade C packaging become illegal?

From 2030. Grade B becomes disqualified from 2038. The transition forces producers to redesign now because tooling, supplier qualification, and shelf-life testing typically take 18 to 36 months.

How is the grade actually calculated?

Per Annex II of PPWR, harmonised with EN 13430:2004 and the Design for Recycling implementing acts. Each packaging unit is scored on separability, recognisability by sorters, and compatibility with the target recycling stream.

What are the most common reasons for a grade C downgrade?

Carbon black pigments, full-sleeve labels in non-matching polymers, multi-layer flexible films, PVC closures, components below the 5 cm sorter threshold, and adhesives that do not release in the wash step.

Can a multi-material pack achieve grade A?

Only if the secondary materials are below 5 percent by weight and physically separable, or the pack moves to a mono-material structure.

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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