



Tti Testing Laboratories

OVER 30 YEARS OF EXCELLENCE IN QUALITY ASSURANCE

APPLIES SINCE

**12 Aug
2026**

PPWR • EU PACKAGING AND PACKAGING WASTE REGULATION (EU) 2025/40

Your product is tested. Now test its **packaging**.

A PPWR guide for Pakistani exporters and their packaging suppliers.

Since 12 August 2026, one EU law covers every pack on the EU market, wherever it was made. Tti Labs tests packaging against its limits and supports your documentation.



01 The PPWR today

02 Key dates

03 Recycling & reuse

04 Limits & testing

05 Who does what

06 The compliance file

07 How Tti Labs helps

111 786 001

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REGULATION (EU) 2025/40

One law for every pack on the EU market.

Since 12 August 2026, every pack placed on the EU market falls under one law, wherever it was made. That includes packs made in Pakistan.

EVERY MATERIAL IS COVERED

Plastic

Paper and board

Glass

Metal

Wood

Textile

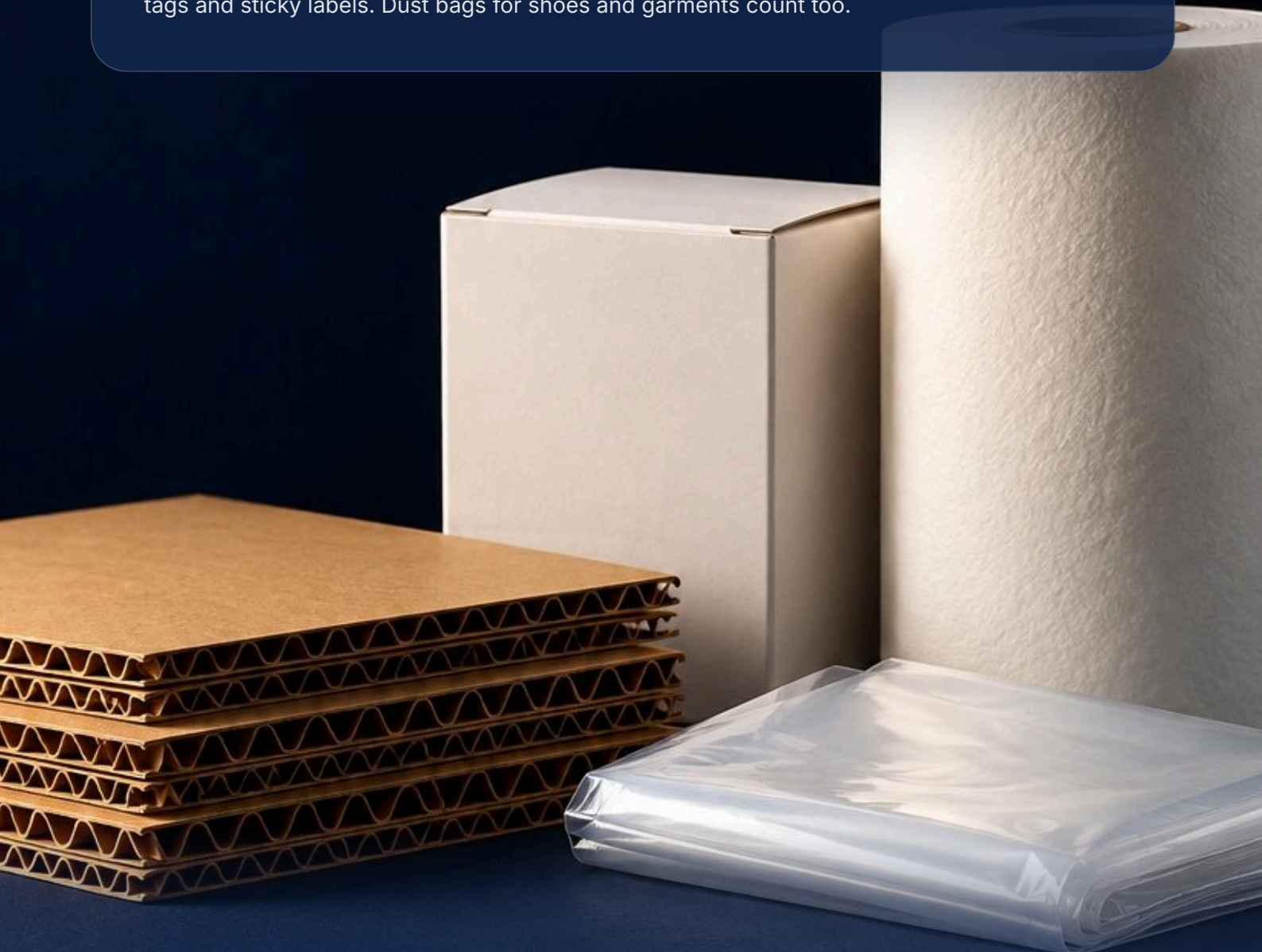
Composite

The list is wider than many expect. A hanger sold with a shirt is packaging, and so are hang tags and sticky labels. Dust bags for shoes and garments count too.

HAS IT BEEN DELAYED?

No.

It has applied since 12 August 2026. The stalled EU proposal concerns the EPR authorised-representative rule, not the start date.



SINCE 12 AUGUST 2026

Four duties apply now.

They apply to every pack placed on the EU market, wherever it was made. The PFAS limits cover food-contact packaging only. Every pack must also minimise substances of concern.



01 Heavy metals

Lead, cadmium, mercury and hexavalent chromium, added together: 100 mg/kg at most. The limit covers all packaging and its components, inks included.

PAGE 07



02 PFAS limits

Food-contact packaging only: 25 ppb for any one PFAS, 250 ppb for the sum and 50 ppm in total. A result on a limit fails.

PAGES 08-09



03 The compliance file

A conformity assessment, technical documentation and an EU declaration of conformity. The manufacturer signs the declaration.

PAGE 12



04 The marking

A type, batch or serial number on every pack, plus the manufacturer's name and postal address.

PAGE 13

FROM 2026 TO 2040

Some duties apply now. Others follow in **steps**.

12 AUG

2026

APPLIES NOW

Metals and PFAS
limits; the file
and the marking

12 FEB

2028

Sales packs: empty
space cut to the
minimum

12 AUG

2028

OR LATER

Harmonised
sorting label;
old material
codes end

1 JAN

2030

Six single-use
formats banned;
40% reusable
transport packs

1 JAN

2030

OR LATER

Grades A-C only;
recycled content;
50% empty space

1 JAN

2038

Grades A-B only

1 JAN

2040

Higher recycled
content; aim of
70% reuse

KEY



Applies now

Fixed in the
RegulationOr later: moves if
an EU act is late

Dashed tags read "or later". The duty starts at the later of the date shown and a set period after a Commission act. The other dates are fixed in the Regulation, which entered into force on 11 February 2025.

Status on 13 October 2026. The Commission published its guidance (C/2026/3084) on 10 June 2026 and the second edition of its FAQ on 3 August 2026. The sorting-label act was due on 12 August 2026. It is overdue, and no new date is confirmed.

ARTICLES 6 AND 7 · FROM 2030, OR LATER

Next: recycled plastic and recyclability **grades**.

RECYCLED PLASTIC CONTENT, MINIMUM

Contact-sensitive PET



Other contact-sensitive plastic



Single-use plastic beverage bottles



Other plastic packaging, such as most polybags

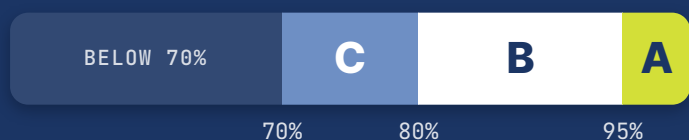


2030, OR LATER 2040

HOW IT IS COUNTED

- Averages per manufacturing plant and year.
- Only post-consumer plastic counts. Factory scrap does not.
- Plastic recycled outside the EU counts only under equivalent rules. The method is due by 31 December 2026.
- Exempt, among others: plastic parts under 5% of the unit's weight.

RECYCLABILITY GRADES



Grade A: 95% or more. Grade B: 80% or more.
Grade C: 70% or more. Below 70%, a pack is not recyclable.

WHEN THE GRADES COUNT

- From 2030, or later: grades A–C only.
- From 1 January 2038: grades A–B only.
- No pack has an official grade yet. The criteria are due by 1 January 2028.
- Until then, no PPWR recyclability assessment is required.

MYTH AND FACT

~~"Recyclable means 100% recyclable."~~

Fact: from 2030, or later, grades A–C pass, and grade C means 70% or more. From 2038, only A–B.

ARTICLES 10, 24, 25 AND 29

Less empty space. More reuse. Six formats **out**.

50% at most

Empty space in grouped, transport and e-commerce packs, from 2030, or later.

- Fillers count as empty: paper, air cushions, bubble wrap and foam.
- The firm that fills the pack meets the cap.
- Sales packs: empty space cut to the minimum from 12 February 2028.

40% reusable

Of transport packaging used within the EU, from 1 January 2030.

- The duty starts at the first EU warehouse.
- Cardboard boxes, corrugated included, are exempt. Interlayers are not.
- From 1 January 2030, every pack must also be minimised in weight and volume.

SIX SINGLE-USE FORMATS BANNED FROM 1 JANUARY 2030 • ANNEX V

• 01 Plastic grouped packaging, such as shrink and collation film

• 02 Plastic packs for fresh fruit and vegetables under 1.5 kg

• 03 Plastic packs for food and drink consumed in hotels, restaurants and cafés

• 04 Plastic portions of condiments and sugar in hotels, restaurants and cafés

• 05 Hotel toiletry packaging, in any material

• 06 Very lightweight plastic carrier bags



PAPER-BASED PACKS CAN BE CAUGHT

With 5% plastic or more, a paper-based pack counts as plastic for the bans. Tti Labs identifies materials by FTIR and weighs each component.

ARTICLE 5(4) • ALL PACKAGING • SINCE 12 AUGUST 2026

Add the four metals before you read the **verdict**.

• Pb + • Cd + • Hg + • Cr(VI)

100 mg/kg at most, the four together

- The limit covers all packaging and its components, printed board and inks included.
- It is not new: the old directive had the same figure. What changed is who holds the proof.
- The Commission recommends CEN report CR 13695-1:2000 to show compliance.

MYTH AND FACT

~~"Each metal can reach 100 mg/kg."~~

Fact: the four are added. The sum must stay at 100 mg/kg or less.

TWO DEROGATIONS STAY

Glass, where recycled glass causes the excess and nothing is added on purpose. Plastic crates and plastic pallets.

SUBSTANCES OF CONCERN

Every pack must minimise them. Until a new standard exists, assess this under Annex C of EN 13428:2004.



AT TTI LABS, IN LAHORE

Lead, cadmium and mercury by ICP-OES or ICP-MS, plus hexavalent chromium: the four results your file needs.

AVAILABLE



ARTICLE 5(5) • FOOD-CONTACT PACKAGING ONLY • SINCE 12 AUGUST 2026

Three PFAS limits. A result on the limit fails.

25 ppb

Any one PFAS, by targeted analysis

250 ppb

The sum of PFAS, by targeted analysis

50 ppm

All PFAS, polymeric PFAS included

The text says “equal to or above”, so a result exactly on a limit fails. Above 50 mg/kg total fluorine, the chemical supplier must, on request, prove how much of it is PFAS.

- Intentional and unintentional PFAS both count.
- The whole unit counts: inks, varnishes, glues and adhesives too.
- No list of PFAS will be published. Any CF_3 or CF_2 group counts.
- Recycled board gets no exemption.
- For imports, the customs release date counts. Older stock gets no sell-off period.
- Not food contact? These limits do not apply, but every pack must minimise substances of concern.

Since 10 October 2026, a separate REACH limit for PFHxA also covers food-contact paper and board (Regulation (EU) 2024/2462). It is not part of the PPWR.

CHECKING PFAS • COMMISSION GUIDANCE C/2026/3084

Step 1 is total **fluorine**.

No harmonised EU method exists yet. The Commission recommends three steps.

01

Total fluorine

Below 50 mg/kg, the sample can be considered compliant.



02

Organic or inorganic?

Above 50 mg/kg, methods such as pyrolysis-GC/MS show which kind. Organic fluorine below 50 mg/kg can be compliant.



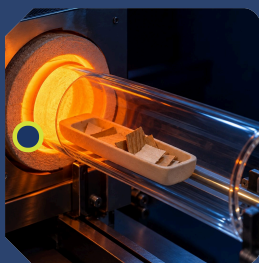
03

Targeted check

A direct TOP assay (total oxidisable precursors) checks the 25 and 250 ppb limits.

- On the Commission's evidence so far, every sample that passed step 1 also passed steps 2 and 3.
- In early tests, only packs with intentionally added PFAS exceeded the limits.
- A harmonised protocol is being prepared with the EU reference laboratory for food-contact materials.
- Check the hot spots first: greaseproof paper and moulded-fibre trays.

AT TTI LABS, IN LAHORE



TOTAL FLUORINE

By combustion ion chromatography (CIC). The first TOF/PFAS screening by CIC in Pakistan.

AVAILABLE



TARGETED PFAS

By LC-MS/MS, for the 25 and 250 ppb limits.

AVAILABLE



ROLES UNDER THE PPWR

Every pack has one manufacturer. It may be you.

The manufacturer is whoever has the pack made under its own name or trademark. That is often not the factory. With two brands on a pack, whoever decides its design and specification holds the role.

ROLE	WHO IT IS	WHAT IT MUST DO
Manufacturer	Has the pack made under its own name or trademark. Without a brand, it orders the pack and sets the design. One per supply chain.	Conformity assessment, technical file, declaration and marking. Keeps the file for 5 or 10 years.
Supplier	Supplies packaging or packaging material to the manufacturer.	Hands over the information and documents the file needs (Article 16).
Importer	Established in the EU. Places packaging made outside the EU on the market.	Checks that the non-EU manufacturer did the assessment and declaration. Adds its own name and address, and keeps a copy.
Distributor	Makes packaging available after it was first placed on the market.	Checks the producer's registration and the labels.
Producer (EPR)	First makes the pack available in an EU country, or sells direct to end users there.	Registers, reports and pays extended producer responsibility fees in that country.
Authorised representative	Optional for the manufacturer. Required for EPR when you sell direct to end users in another country.	Acts for the manufacturer, but cannot draw up the technical file.

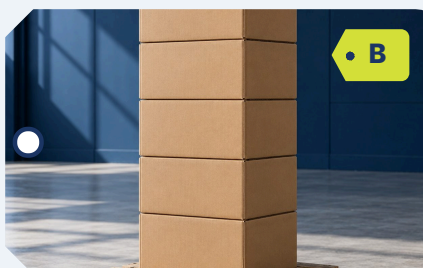
SIX EXPORTER SCENARIOS

Find your case. Your role sets your duties.



Private label for an EU retailer

Garments packed in the retailer's branded polybags and tags. The retailer is the manufacturer; you are a supplier. Expect requests for test reports and material data.



Plain export cartons

Standard and unbranded: the carton maker is normally the manufacturer. Made to your order and design: you are. Transport packs need their own assessment and declaration.



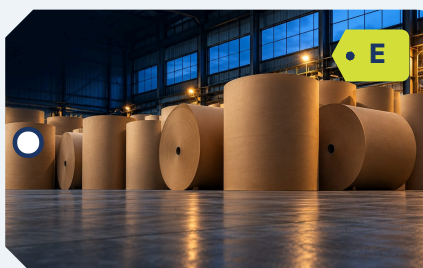
Own brand, through an EU importer

You are the manufacturer. You owe the assessment, the file and the declaration, in the language of the destination country. The importer checks your work.



Direct to EU consumers

Webshop or marketplace. You are the producer in each country you sell to. Register and report there, and appoint an EPR authorised representative.



Packaging converter

Polybags, cartons, labels or tissue. You are a supplier. Give customers the data their file needs: material, metals in inks and board, and PFAS for food contact.



Food exporter

Rice, spices, fruit. The PFAS limits apply now. For imports, the customs release date counts, and older stock gets no sell-off period.

Goods only in transit through the EU need not comply. Exports outside the EU carry no EU EPR.

ANNEX VII AND ANNEX VIII • REQUIRED SINCE 12 AUGUST 2026

There is no PPWR certificate. There is a **file**.

The manufacturer proves compliance with a technical file and an EU declaration of conformity. Test reports feed the file. The manufacturer signs the declaration.

1 • Conformity assessment

Module A, internal production control (Annex VII). A laboratory may carry it out for the manufacturer. No advance notice to the authorities is needed.

2 • Technical documentation

- Description and intended use
- Design, drawings and component materials
- Standards and specifications applied
- Assessments under Articles 6, 10 and 11
- Test reports
- An analysis of the risk of non-conformity

3 • EU declaration of conformity

One per packaging type: each format or batch series. It covers the whole unit, such as bottle, cap and label. Write it in the language of each country where the pack is supplied. It may also cover other EU acts.

4 • No supplier data?

You still owe the file. The Commission expects best efforts, including your own assessments. Testing is how.

CAN A LAB SIGN IT FOR US?

No.

A lab may carry out the conformity assessment for you. The technical file cannot be delegated, and the manufacturer still answers for the declaration.

ARTICLE 15 • SINCE 12 AUGUST 2026

Mark every pack. Keep the file **ready**.



THE MARKING

- A type, batch or serial number on every pack.
- The manufacturer's name and postal address.
- On the pack, or behind a QR code or other data carrier. One component of the unit is enough.
- Use an accompanying document only where the pack cannot carry it.
- Stock made before 12 August 2026 need not be destroyed or relabelled. An accompanying document can carry the ID and address.

THE RECORDS

5 years

Keep the file for single-use packs.

10 years

Keep the file for reusable packs.

10 days

To hand the file to an authority that asks.

1

Declaration per packaging type.

WILL GOODS BE SEIZED AT ONCE?

The Commission asks authorities to warn first and to allow a correction. National authorities still decide.

DO WE NEED THE EU SORTING LABEL NOW?

No. Its design is not adopted yet. It cannot apply before 12 August 2028.

TESTED IN LAHORE • DOCUMENTATION SUPPORT

Test reports for your technical file.

Tti Labs tests packaging against the PPWR limits and supports your documentation. The manufacturer signs the declaration.

PPWR NEED	TTI LABS SERVICE	STATUS
Heavy metals • Art. 5(4)	Pb, Cd and Hg by ICP-OES or ICP-MS; Cr(VI)	AVAILABLE
PFAS step 1 • total fluorine	Total fluorine by combustion ion chromatography (CIC)	AVAILABLE
PFAS limits • Art. 5(5)	Targeted PFAS by LC-MS/MS	AVAILABLE
Materials • the 5% plastic line	FTIR identification; weighing of each component	AVAILABLE
Minimisation • empty space	Packaging weight; dimensional checks	AVAILABLE
Food-contact rules	Overall and specific migration; extractables and leachables	AVAILABLE
Marking and packing	Checks at pre-final and pre-shipment inspection and at loading, by Tti Inspections Pvt Ltd (ISO/IEC 17020, PNAC IB-006)	AVAILABLE
Supplier data	Supply chain mapping by Tti Labs Sustainability Center	AVAILABLE
Recycled content • Art. 7	Recycled plastic verification	PARTNER LABS
Recyclability • Art. 6	Recyclability assessment; documentation support	TECHNICAL SUPPORT
File and declaration	Gap assessment; support with the Annex VII file and the declaration	TECHNICAL SUPPORT

AVAILABLE

offered by Tti Labs

PARTNER LABS

through partner laboratories

TECHNICAL SUPPORT

guidance and documentation

What Tti Labs does not do. Tti Labs reports results for the samples it tests. It is not the manufacturer and does not sign declarations. It issues no “PPWR certificate”, does not register producers and does not act as an authorised representative. It assigns no official recyclability grade.

GET READY

What your EU buyer will ask for.

Have these ready for every SKU. A navy label marks the tests and checks we can run for you.



- 01 A list of every packaging component per SKU, with material, weight, dimensions and supplier.
- 02 Material identification for unknown or composite items, and the plastic share in paper-based packs. **Tti Labs**
- 03 A heavy metals report per packaging type, showing the sum of the four metals. **Tti Labs**
- 04 For food contact: total fluorine results, targeted PFAS where needed, and migration results under Regulation (EU) No 10/2011. **Tti Labs**
- 05 Supplier declarations from converters, ink makers and adhesive makers.
- 06 Proof of the type or batch ID, and the manufacturer's name and address, on each pack. **Tti Inspections**
- 07 For own brands: the Annex VII file and the declaration, in the destination country's language.
- 08 For direct sellers: EPR registrations and representative mandates in each country.
- 09 Later, in 2028–2030 or later: recyclability evidence, recycled-content proof, empty-space figures and label artwork.

WORK WITH US

• 01

Send your packaging list.

Every component per SKU, with its material, weight and supplier.

quotations@ttilabs.net

• 02

Gap assessment.

Ask for a PPWR gap assessment for your role and your packs.

marketing@ttilabs.net

• 03

Send samples.

Register your samples online.

etr.f.ttilabs.net

• 04

Get the reports.

Test reports for your technical file.

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Tti Testing Laboratories

The future of Made in Pakistan is verified.

Ask for a PPWR gap assessment. Send us your packaging list, and we will tell you what to test. Confidence, Verified.

1995

IN SERVICE SINCE

1,500+

TESTS A DAY

600+

SAMPLES A DAY

1,500+

GLOBAL BRANDS SERVED

ISO/IEC 17025 · PNAC Lab 022

ISO/IEC 17020 · PNAC IB-006

U.S. IAC certified microbiology lab

PSQCA approved

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Orientation only, not legal advice. Summaries of Regulation (EU) 2025/40, Commission guidance C/2026/3084 and the Commission's PPWR FAQ (2nd edition), read 13 October 2026. Status words describe availability, not accreditation scope; confirm the method when you order. Images are illustrative, AI-generated or from Unsplash; they do not show Tti Labs premises, clients or samples.

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