

Recyclability of plastic pots, trays and other rigid* packaging items

March 2025 (version 3.2)

Which packaging is covered by this guide?

“Plastic pots and trays”, i.e. **all rigid plastic household packaging except bottles and dispenser bottles***



Please note

As far as **cling film**, **heat-shrink** and **non-heat-shrink flow packs** are concerned, we consider that flexible packaging is not associated with the tray and will be sorted separately. The eco-design recommendations for flow packs are therefore the same as those for flexible packaging items (*not included in this guide*)



* Non-exhaustive images

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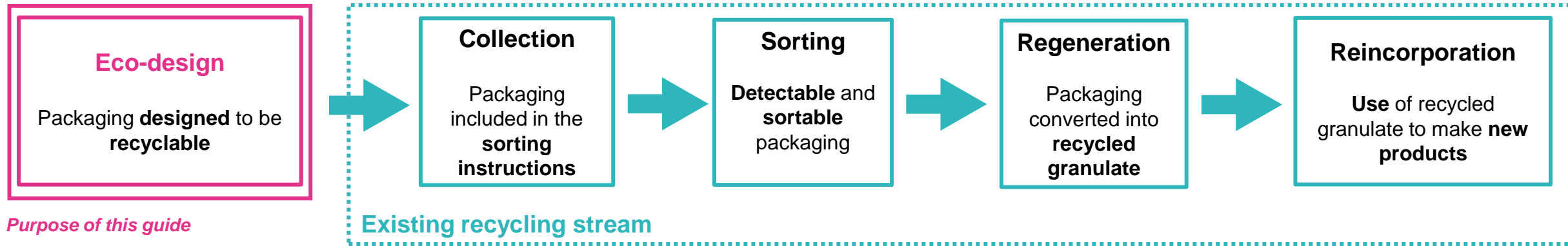
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Introduction

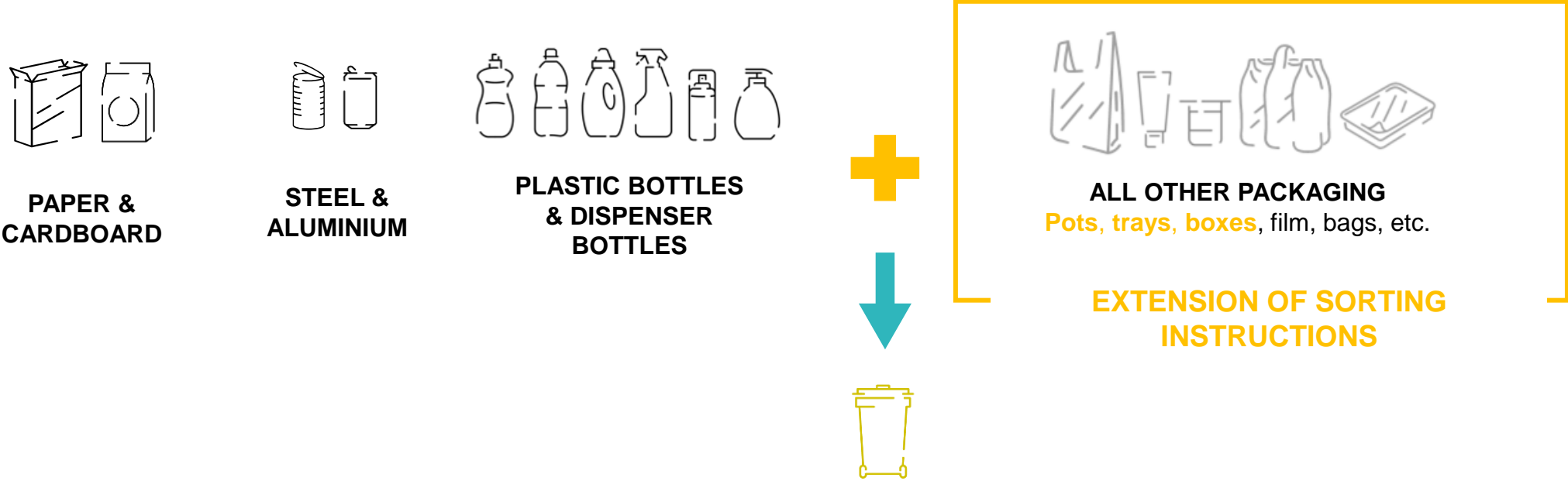
What conditions must be met for a packaging item to be recyclable?



- ❑ This document summarises the COTREP eco-design recommendations to date aimed at improving the recyclability of plastic pots and trays. It sets out the **design principles that should be adopted to ensure that packaging can be integrated into existing or emerging recycling streams**.
- ❑ These recommendations are based on the **operating conditions that currently exist** (for existing streams) **and those planned for 2027-2028** (for streams under development) **for collection, sorting and recycling** in France, where **sorting and recycling streams for plastics are being consolidated or developed**. These recommendations may therefore change to take these developments into account.
- ❑ Some of the solutions presented in this guide are already “recyclable” in France, but not necessarily all of them (for example clear PET/PE pots and trays for which a stream is under development).

Context – Collection of plastic pots and trays in France

Following the extension of sorting instructions, as of 2023 all household packaging, including pots and trays, is disposed of in sorting bins throughout France.

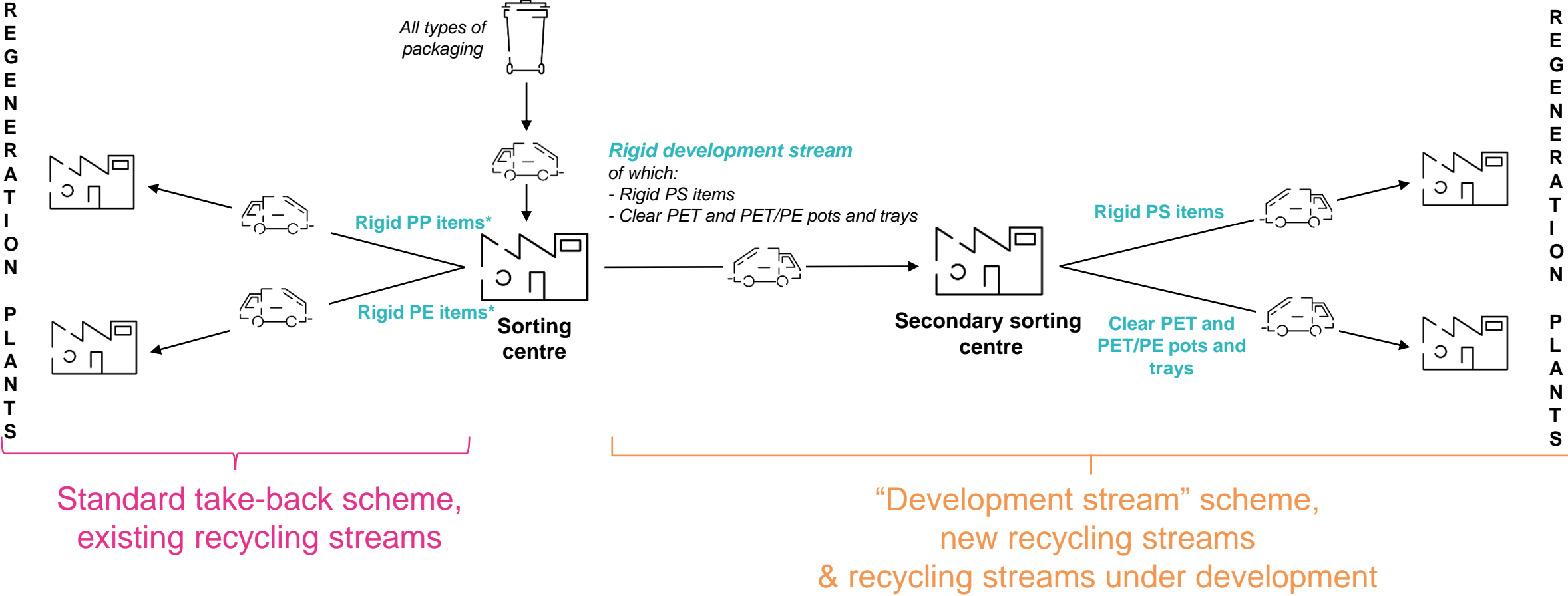


Due to the extension of sorting instructions and consumer waste sorting, the tonnage of pots and trays disposed of in sorting bins is on the rise.

The packaging is then collected and transported to a **sorting centre**.

Context – Sorting of plastic pots and trays in France

Plastic pot and tray sorting differs according to the resin used for the pot or tray body:



* Rigid PP and rigid PE items are generally separated at the regeneration plant for different recovery processes.

Context – Recycling streams for plastic pots and trays

Recycling streams in existence for several years

PP stream

- ❑ Stream accepting rigid PP packaging: bottles, dispenser bottles, **pots, trays and other rigid packaging items**
- ❑ **Mechanical recycling** (recycled material not suitable for food contact)

Recommendations for PP packaging

PE stream

- ❑ Stream accepting rigid PE packaging: bottles, dispenser bottles, **pots, trays and other rigid packaging items**
- ❑ **Mechanical recycling** (recycled material not suitable for food contact)

Recommendations for PE packaging



Please note: pots, trays and other rigid PP or PE packaging items meeting COTREP recommendations are already recyclable in France under the terms of the [QCE Decree](#).

Context – Recycling streams for plastic pots and trays

Two “new” recycling streams in 2025

PS stream

- ❑ Stream accepting **rigid PS packaging including pots and trays**
- ❑ **Mechanical recycling** (recycled material not suitable for food contact) **and chemical recycling** (recycled material suitable for food contact)

Recommendations for PS packaging

Clear PET stream

- ❑ Stream accepting **clear PET pots and trays (with and without seal lids)**
- ❑ **Mechanical recycling at present, combined with chemical recycling eventually** (recycled material suitable for food contact)

Recommendations for clear PET packaging

Please note:

- The COTREP recommendations cover both mechanical and chemical recycling.
- Since the extension of sorting instructions has been in place, a small quantity of pots, trays and other rigid PS and clear PET items placed on the market has been recycled.
- Starting in 2025, PS and clear mono-PET pots and trays (with or without seal lids) meeting COTREP recommendations will be recyclable in France under the terms of the [QCE Decree](#).

Context – Recycling streams for plastic pots and trays

Recycling streams under development

Clear PET/PE stream

- Stream accepting **clear PET/PE pots and trays**
- Chemical recycling** (recycled material suitable for food contact)

Recommendations for clear PET/PE packaging

Coloured PET and PET/PE stream

- Study underway** to enable the channelling and recycling of coloured PET and PET/PE pots and trays
- Probably for chemical recycling** (recycled material suitable for food contact)

General information about coloured PET and PET/PE packaging



Please note: coloured PET or (clear or coloured) PET/PE pots and trays are not recyclable in 2025 under the terms of the [QCE Decree](#). Switch to “recyclable” foreseen by 2027-2028.

Three eco-design rules to follow to make a pot or tray easier to recycle

1. Priority for recycling should be given to the heaviest element of the packaging, i.e. the tray or pot body

As such, the body must be **mono-material**, and if possible **mono-resin***, and made of a resin which has a recycling stream: **rigid PP, PE, PS, clear PET, coloured PET** and PET/PE****.

2. Barriers, colorants, fillers and additives in the body should not compromise sorting and recycling

For example, the pots and trays should not contain dark colorants that are undetectable by optical sorting. Compatible functional barriers should be used.

3. The associated elements should not disrupt recycling of the tray or pot body

Design choices for associated elements (covers, lids, absorbent pads, labels, etc.) should be based on the resin used in the body.



The **associated elements**, such as labels, lids and absorbent pads are not generally intended to be recycled together with the pot or tray as they can lead to problems in the process and/or lower recycled material quality, particularly during mechanical material recycling. Their design should generally enable them to be separated from the pot or tray during the collection, sorting and recycling stages.

Recommendations for a pot or tray:



Click to directly access
recommendations

* Excluding compatible barriers and resins

** Streams under development/review

Pots and trays with a PP body (1/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Pot or tray body

Materials and barriers

If possible use: mono-PP

- ✓ EVOH* barrier with tie layer
- ✓ Carbon black barrier as an internal layer
- ✓ Kapseal[®] barrier
- ✓ PP associated with PE*
- ✗ Other material/resin/barrier (multi-layer, blend)

Colorants

If possible use: colourless or white

- ✓ Colourless and all colours
- ✗ Non-sortable dark colorant in external layer

Additives (gases, fillers, agents) and density

- ✓ Surface silicone for unstacking
- ✓ Expanded PP (gases, blowing agents) of density < 1 – [Not assessed](#)
- ✓ UV stabiliser
- ✗ Mineral-filled PP (fillers and other agents) of density > 1
- ✗ PP mineral-filled then expanded

Inks** and designs on PP body

If possible: no printing or laser marking

- ✓ Direct printing with ink not washable at room temperature
- ✗ Direct printing with washable or metallic ink
- ✓ PP-based IML with or without EVOH
- ✓ PE-based IML with or without EVOH
- ✗ IML with plastic resin other than that used for the packaging



1

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

For further details

Dark colorants

Fillers and density

Designs

* Quantities of EVOH and PE should be limited *as much as possible*, i.e. use the minimum quantity to ensure that the packaging is functional.
To date, the impact of tie layers between PP (or PE) and EVOH has not been studied and does not seem to be an obstacle.

** EuPIA Best Practices

Pots and trays with a PP body (2/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Choice of closure systems *if necessary:*



Non-sealed/bonded cover ⁽¹⁾

If possible use: PP

- ✓ PE
- ✓ Plastic of density > 1
- ✓ Metal
- ✗ Wood
- ✗ Other plastic of density < 1
- ✗ Thermoset plastics



Mono- or multi-material seal lid of density > 1 ⁽²⁾

- ✓ Peelable and/or water-releasable adhesive
- ✗ Non-peelable and adhesive that is not released during washing



Seal lid of density < 1 combining only PP, PE, EVOH, surlyn and/or SiOx, AlOx, COx coating

- ✓ Peelable and/or water-releasable adhesive
- ✓ Non-peelable and adhesive that is not released during washing



Aluminium seal lid

- ✓ Peelable and/or water-releasable adhesive
- ✗ Non-peelable and adhesive that is not released during washing



Other mono- or multi-material seal lid of density < 1 ⁽²⁾

- ✗ Peelable and/or water-releasable adhesive
- ✗ Non-peelable and adhesive that is not released during washing

Key

- ✓ Compatible
- ✓ Compatible but to be avoided
- ✗ Non-compatible and/or disruptive

Skin film

- ✓ Peelable skin film of $d < 1$ composed of PE, PP, EVA, EVOH with binder layer, surlyn, coating
- ✓ Non-peelable skin film of $d < 1$ composed of PE, PP, EVA, EVOH with binder layer, surlyn, coating
- ✓ Mono- or multi-material peelable skin film of $d > 1$
- ✗ Non-peelable skin film
- ✗ PVC
- ✗ Thermoset plastic skin film of $d < 1$
- ✗ Other skin films of $d < 1$

Designs/inks on the closure system

- ✓ Ink not washable ⁽³⁾ at room temperature
- ✗ Ink washable at room temperature
- ✗ Metallic ink

Find out more

Assembly

via heat sealing

- Preferably apply a sealing layer of PP or PE
- Preferably apply a sealing layer that remains mainly on the seal lid

via bonding

- Preferably use an adhesive that is released during washing and/or remains mainly on the seal lid

⁽¹⁾ Analysis based on the principle that a cover is not separated from the pot.

⁽²⁾ Examples: seal lid with several plastic resins, plastic/paper, plastic with a thin layer of aluminium.

⁽³⁾ Examples: sandwich printing or surface printing with varnish.

Pots and trays with a PP body (3/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Label affixed to the body or cover *if necessary*

Label materials

If possible use: PP, OPP, PE with water-releasable adhesive*

- ✓ Paper with water-releasable adhesive*
- ✓ Paper wrap with a line of adhesive that is not released during washing*
- ✓ PP, OPP with adhesive that is not released during washing*
- ✓ Plastic with a density > 1 (e.g. PET, PETg, PS) with water-releasable adhesive*
- ✓ Paper PSL with adhesive that is not released during washing*
- ✓ PE with adhesive that is not released during washing*
- ✗ PVC
- ✗ Other plastic of density < 1
- ✗ Plastic of density > 1 with adhesive that is not released during washing*
- ✗ Complex with aluminium layer (e.g. PP/AL)

Other

- ✓ PP IML with or without EVOH
- ✗ IML with plastic resin other than that used for the packaging
- ✓ PE IML with or without EVOH
- ✗ RFID tag

Adhesive

- ✓ Released during washing* without leaving residue on the packaging
- ✗ Not released during washing*

Designs/inks on labels

- ✓ Non-washable ink*
- ✗ Washable ink*
- ✗ Metallic ink

Size of the labels

- **Restrict the coverage and size of associated elements** to maximise the chances of the pot or tray being detected at sorting centres
 - For packaging > 500 mL: surface area of < 70%
 - For packaging < 500 mL: surface area of < 50%



Reminder: the labels (element associated with the packaging body) are not intended to be recycled, but they should not disrupt recycling of the pot or tray body. The aim is to separate them from the pot or tray during the recycling stages.

Key

- ✓ Compatible
- ✓ Compatible but to be avoided
- ✗ Non-compatible and/or disruptive

For further details

Other associated element: absorbent pad

* Washing at room temperature.

Pots and trays with a PP body (4/4)

(based on the latest information available to COTREP in 2025)

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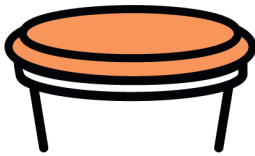
RECAP – IDEAL SOLUTIONS

1

Pot or tray body
Mono-PP (d<1)

2

Non-sealed/bonded cover



If possible use: PP
Options: PE or plastic of density > 1

Closure system, if necessary

Seal lid of density > 1
mono- or multi-material*
peelable and/or with water-releasable adhesive



Seal lid of density < 1
combining only PP, PE, EVOH, surlyn
and/or SiOx, AlOx, COx coating
peelable and/or with water-releasable adhesive



For further information – Seal lid assembly

Heat sealing: PE or PP sealing layer and/or sealing layer that remains mainly on the seal lid
Bonding: adhesive that is water-releasable at room temperature and/or remains mainly on the seal lid

Designs on closure system, if necessary

Ink not washable at room temperature

3

Label on body or cover, if necessary

PP, OPP, PE with adhesive that is water-releasable at room temperature and non-washable ink

Pots and trays with a PE body (1/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Pot or tray body

Materials and barriers

If possible use: mono-PE

- ✓ EVOH barrier with tie layer*
- ✓ Carbon black barrier as an internal layer
- ✓ Surlyn[®]
- ✓ PE associated with PP*
- ✗ Other material/resin/barrier (multi-layer, blend)
- ✗ Thermoset plastics

Colorants

If possible use: colourless or white

- ✓ Colourless and all colours
- ✗ Non-sortable dark colorant in external layer

Additives (gases, fillers, agents) and density

- ✓ Surface silicone for unstacking
- ✓ Expanded PE (gases, blowing agents) of density < 1 – [Not assessed](#)
- ✓ UV stabiliser
- ✗ Mineral-filled PE (fillers and other agents) of density > 1
- ✗ PE mineral-filled then expanded



Inks** and designs on PE body

If possible: no printing or laser marking

- ✓ Direct printing with ink not washable at room temperature
- ✗ Direct printing with washable or metallic ink
- ✓ PE-based IML with or without EVOH
- ✓ PP-based IML with or without EVOH
- ✗ IML with plastic resin other than that used for the packaging

* Quantities of EVOH and PP should be limited as much as possible, i.e. use the minimum quantity to ensure that the packaging is functional.
To date, the impact of tie layers between PE (or PP) and EVOH has not been studied and does not seem to be an obstacle.

** EuPIA Best Practices

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

For further details

Dark colorants

Fillers and density

Designs

Pots and trays with a PE body (2/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Choice of closure systems *if necessary:*



Non-sealed/bonded cover ⁽¹⁾

If possible use: PE

- ✓ PP
- ✓ Plastic of density > 1
- ✓ Metal
- ✗ Wood
- ✗ Other plastic of density < 1
- ✗ Thermoset plastics



Mono- or multi-material seal lid of density > 1 ⁽²⁾

- ✓ Peelable and/or water-releasable adhesive
- ✗ Non-peelable and adhesive that is not released during washing



Seal lid of density < 1 combining only PE, PP, EVOH, surlyn coating

- ✓ Peelable and/or water-releasable adhesive
- ✓ Non-peelable and adhesive that is not released during washing



Aluminium seal lid

- ✓ Peelable and/or water-releasable adhesive
- ✗ Non-peelable and adhesive that is not released during washing



Other mono- or multi-material seal lid of density < 1 ⁽²⁾

- ✗ Peelable and/or water-releasable adhesive
- ✗ Non-peelable and adhesive that is not released during washing

Skin film

- ✓ Peelable skin film of $d < 1$ composed of PE, PP, EVA, EVOH with binder layer, surlyn, coating
- ✓ Non-peelable skin film of $d < 1$ composed of PE, PP, EVA, EVOH with binder layer, surlyn, coating
- ✓ Mono- or multi-material peelable skin film of $d > 1$
- ✗ Non-peelable skin film
- ✗ PVC
- ✗ Thermoset plastic skin film of $d < 1$
- ✗ Other skin films of $d < 1$

Designs/inks on the closure system

- ✓ Ink not washable ⁽³⁾ at room temperature
- ✗ Ink washable at room temperature
- ✗ Metallic ink

Find out more

Assembly

via heat sealing

- Preferably apply a sealing layer of PP or PE
- Preferably apply a sealing layer that remains mainly on the seal lid

via bonding

- Preferably use an adhesive that is released during washing and/or remains mainly on the seal lid

Key

- ✓ Compatible
- ✓ Compatible but to be avoided
- ✗ Non-compatible and/or disruptive

⁽¹⁾ Analysis based on the principle that a cover is not separated from the pot.

⁽²⁾ Examples: seal lid with several plastic resins, plastic/paper, plastic with a thin layer of aluminium.

⁽³⁾ Examples: sandwich printing or surface printing with varnish.

Pots and trays with a PE body (3/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Label affixed to the body or cover *if necessary*

Label materials

If possible use: PP, OPP, PE with water-releasable adhesive*

- ✓ Paper with water-releasable adhesive*
- ✓ Paper wrap with a line of adhesive that is not released during washing*
- ✓ PE with adhesive that is not released during washing*
- ✓ Plastic with a density > 1 (e.g. PET, PETg, PS) with water-releasable adhesive*
- ✓ Paper PSL with adhesive that is not released during washing*
- ✓ PP, OPP with adhesive that is not released during washing*
- ✗ PVC
- ✗ Other plastic of density < 1
- ✗ Plastic of density > 1 with adhesive that is not released during washing*
- ✗ Complex with aluminium layer (e.g. PP/AL)

Other

- ✓ PE IML with or without EVOH
- ✓ PP IML with or without EVOH
- ✗ IML with plastic resin other than that used for the packaging
- ✗ RFID tag

Adhesive

- ✓ Released during washing* without leaving residue on the packaging
- ✗ Not released during washing*

Designs/inks on labels

- ✓ Non-washable ink*
- ✗ Washable ink*
- ✗ Metallic ink

Size of the labels

- **Restrict the coverage and size of associated elements** to maximise the chances of the pot or tray being detected at sorting centres
 - For packaging > 500 mL: surface area of < 70%
 - For packaging < 500 mL: surface area of < 50%



Reminder: the labels (element associated with the packaging body) are not intended to be recycled, but they should not disrupt recycling of the pot or tray body. The aim is to separate them from the pot or tray during the recycling stages.

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

* Washing at room temperature.

3

Pots and trays with a PE body (4/4)

(based on the latest information available to COTREP in 2025)

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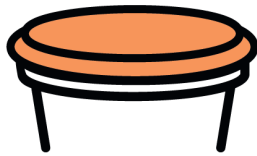
RECAP – IDEAL SOLUTIONS

1

Pot or tray body
Mono-PE ($d < 1$)

2

Non-sealed/bonded cover



If possible use: PE
Options: PP or plastic of density > 1

Closure system, if necessary

Seal lid of density > 1
mono- or multi-material*
peelable and/or with water-releasable adhesive



Seal lid of density < 1
combining only PP, PE, EVOH, surlyn
and/or SiOx, AlOx, COx coating
peelable and/or with water-releasable adhesive



For further information – Seal lid assembly

Heat sealing: PE or PP sealing layer and/or sealing layer that remains mainly on the seal lid
Bonding: adhesive that is water-releasable at room temperature and/or remains mainly on the seal lid

Designs on closure system, if necessary

Ink not washable at room temperature

3

Label on body or cover, if necessary

PP, OPP, PE with adhesive that is water-releasable at room temperature and non-washable ink

Pots and trays with a PS body (1/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Pot or tray body

Materials⁽²⁾ and barriers

If possible use: mono-PS

- ✓ PS associated with PE⁽¹⁾
- ✓ EVOH barrier with tie layer⁽¹⁾
- ✓ PA barrier
- ✗ Multi-layer (e.g. PS/PLA, PS/PVC, PS/PET, PS/PETG) excluding PS/PE
- ✗ PS associated with a non-plastic material (wood, ceramics, etc.)
- ✗ PVDC barrier
- ✗ ABS and SAN
- ✗ Other resin/barrier (multi-layer, blend)

Colorants

If possible use: colourless and white

- ✓ Colourless and all colours
- ✗ Non-sortable dark colorant in external layer

Additives (gases, fillers, agents) and density⁽⁴⁾

If possible use: PS with a density of between 1 and 1.1

- ✓ PS with a density of between 0.8 and 1
- ✗ PS density >1.1

Inks⁽³⁾ and designs on PS body

If possible: no printing or laser marking

- ✓ Direct printing
- ✗ Direct printing with metallic ink
- ✓ PS-based IML
- ✗ IML with another plastic resin



1

⁽¹⁾ Quantities of EVOH and PE should be limited as much as possible, i.e. use the minimum quantity to ensure that the packaging is functional.

To date, the impact of tie layers between the PS, PE and EVOH has not been studied and does not seem to be an obstacle.

⁽²⁾ COTREP is not currently able to issue recommendations on EPS packaging (such as inserts). Studies are underway to assess the collection, sorting and recycling possibilities of these packaging items.

⁽³⁾ EuPIA Best Practices

⁽⁴⁾ Once it has confirmation of a recycling stream for XPS and EPS packaging of density < 0.8, COTREP will update its recommendations.

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

For further details

Dark colorants

Fillers and density

Designs

Pots and trays with a PS body (2/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Choice of closure systems *if necessary:*



Non-sealed/bonded cover ⁽¹⁾

If possible use: PS

- ✓ PET
- ✓ PP, PE
- ✓ ABS
- ✓ Paper/Cardboard
- ✓ Metal
- ✗ Wood
- ✗ PVC
- ✗ Thermoset plastics



Mono- or multi-material seal lid ⁽²⁾

If possible use: mono-PS or OPS

- ✓ Peelable
- ✓ Non-peelable



Aluminium seal lid

- ✓ Peelable
- ✓ Non-peelable

Designs/inks on the closure system

- ✓ No printing
- ✓ Other inks
- ✗ Metallic ink

2

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

⁽¹⁾ Analysis based on the principle that a cover is not separated from the pot.

⁽²⁾ Examples: seal lid with several plastic resins, plastic/paper, metallised plastic

Pots and trays with a PS body (3/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Label affixed to the body or cover *if necessary*

Label materials

If possible use: PS, OPS

- ✓ Paper: “partial” coverage rate
- ✓ PP, PE: “partial” coverage rate
- ✓ PS-based IML
- ✓ PET
- ✓ Paper: “full” coverage rate
- ✓ PP, PE: “full” coverage rate
- ✗ PVC
- ✗ IML with another plastic resin

Adhesive

- Washable adhesives allowing the associated elements to be removed at washing are preferable.

Designs/inks on labels

- ✗ Metallic ink
- ✓ Other inks

Sleeves*

If possible use: PS, OPS

- ✗ PVC

Size of the labels

- **Restrict the coverage and size of associated elements** to maximise the chances of the pot or tray being detected at sorting centres.

“Partial” coverage rate:

- For packaging > 500 mL: surface area of < 70%
- For packaging < 500 mL: surface area of < 50%



Reminder: the labels (element associated with the packaging body) should not disrupt recycling of the pot or tray body. If chemical recycling is used and they are made of PS or OPS they can be recycled.

* Other sleeve resins have not been tested and could affect sorting and/or recycling efficiency

Key

- ✓ Compatible
- ✓ Compatible but to be avoided
- ✗ Non-compatible and/or disruptive

For further details

Other associated element: absorbent pad

Pots and trays with a PS body (4/4)

(based on the latest information available to COTREP in 2025)

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RECAP – IDEAL SOLUTIONS

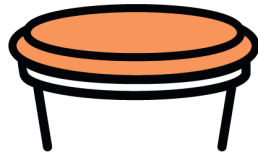
1

Pot or tray body
Mono-PS ($1 < d < 1.1$)

2

Closure system, if necessary

Non-sealed/bonded cover



If possible use: PS

PS or OPS seal lid



Designs on closure system, if necessary

All inks except metallic ones

3

Label on body or cover, if necessary

PS, OPS and PS-based IML

Pots and trays with a clear PET body (1/6)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Pot or tray body

Materials and barriers

If possible use: mono-PET or APET

- ✓ PET associated with a PET-based sealing layer
- ✗ Copolyester (e.g. PETG, PET-GAG, hot-fill PET)
- ✗ PET associated with another resin (PET/PE, PET/PLA, PET/PVC, etc.) – [see PET/PE sheet](#)
- ✗ PET associated with a non-plastic material (paper/cardboard, wood, ceramics, metal, etc.)
- ✗ EVOH barrier
- ✗ PA barrier
- ✗ Other resins and barriers (multi-layer, blend)

Colorants

- ✓ Transparent colourless
- ✓ Transparent blue
- Other colours – [see coloured PET sheet](#)

Additives (gases, fillers, agents) and density⁽¹⁾

- ✓ Surface silicone for unstacking
- ✓ UV stabilisers, AA blockers and optical brightener
- ✗ Bio-/oxo-/photodegradable additives, nanocomposites
- Expanded or mineral-filled PET⁽²⁾ – [see coloured PET sheet](#)

Inks⁽³⁾ and designs on clear PET body

If possible: no printing or laser marking

- ✗ Direct printing

NB: marking the expiry date is tolerated.



1

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

⁽¹⁾Limit additives, particularly halogenated elements

⁽²⁾Mineral-filled, expanded PET materials are not translucent. They are not currently included in the stream.

⁽³⁾EuPIA Best Practices

For further details

Fillers and density

Designs

Pots and trays with a clear PET body (2/6)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Choice of closure system: cover *if necessary*



Non-sealed/bonded cover ⁽¹⁾

- ✓ Unprinted transparent PET
- ✓ PP or PE or other plastic of density < 1



Sealed/bonded cover ⁽²⁾

- ✓ Unprinted transparent PET that is peelable and/or with water-releasable adhesive⁽⁴⁾
- ✓ PP or PE or other plastic with a density < 1, that is peelable and/or with water-releasable adhesive⁽⁴⁾
- ✓ Unprinted transparent PET that is non-peelable and includes non water-releasable adhesive⁽⁴⁾
- ✓ PET associated with a PET-based sealing layer, unprinted

Non-compatible closure systems

- ✗ Coloured, opaque or printed PET ⁽³⁾
- ✗ Copolyester (PETG, PET-GAG, hot-fill PET)
- ✗ Other plastic of density > 1
- ✗ Metal
- ✗ Wood
- ✗ Thermoset plastics
- ✗ PVC

Designs/inks on cover

- ✓ No printing
- ✓ Non-washable ink ⁽⁴⁾ *Examples: sandwich printing or surface printing with varnish.*
- ✗ Washable ink ⁽⁴⁾
- ✗ Metallic ink

Find out more

Assembly via heat sealing

Preferably apply a polyester-based sealing layer ⁽⁵⁾ that remains mainly on the seal lid

Assembly via bonding

Preferably use an adhesive that is released during washing and/or remains mainly on the seal lid

2

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

⁽¹⁾ Analysis based on the principle that a cover is not separated from the pot. Studies could be carried out to assess sorting potential.

⁽²⁾ Studies need to be carried out to assess sorting and regeneration potential.

⁽³⁾ Sealed/bonded printed mono-PET covers require studies to assess their potential at sorting centres.

⁽⁴⁾ Washing in water at 60-80° in alkaline conditions (with soda).

⁽⁵⁾ Additional studies should be conducted on the sealing agents and their potential impact on the quality of rPET, particularly for food contact.

Pots and trays with a clear PET body (3/6)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Choice of closure system: seal lid heat-sealed or bonded *if necessary*



Unprinted transparent PET seal lid

- ✓ Peelable and/or with water-releasable adhesive ⁽²⁾
- ✓ Non-peelable and/or adhesive that is not released during washing ⁽²⁾



Mono- or multi-material seal lid of density $d < 1$ ⁽¹⁾, without metal

- ✓ Peelable and/or water-releasable adhesive ⁽²⁾
- ✗ Non-peelable and/or adhesive that is not released during washing ⁽²⁾



Non-compatible seal lids

- ✗ Seal lid of density < 1 with metal (aluminium layer, metallisation)
- ✗ Mono- or multi-material seal lid of density > 1 (excl. unprinted transparent PET)
- ✗ Aluminium seal lid (peelable or not)
- ✗ Seal lid containing PVDC
- ✗ Thermoset plastics

Designs/inks on the closure system

- ✓ Non-washable ink ⁽²⁾ *Examples: sandwich printing or surface printing with varnish.*
- ✗ Washable ink ⁽²⁾
- ✗ Metallic ink

Find out more

Assembly via heat sealing

Preferably apply a polyester-based sealing layer ⁽³⁾ that remains mainly on the seal lid

Assembly via bonding

Preferably use an adhesive ⁽³⁾ that is water-releasable and/or remains mainly on the seal lid

2

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

⁽¹⁾ *Examples: seal lid with several plastic resins, plastic/paper.*

⁽²⁾ Washing in water at 60-80° in alkaline conditions (with soda).

⁽³⁾ *Additional studies should be conducted on the sealing agents and adhesives and their potential impact on the quality of rPET, particularly for food contact.*

Pots and trays with a clear PET body (4/6)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Labels

On body, cover or unprinted, transparent PET seal lid [if necessary](#)

- ✓ PP, OPP, PE with water-releasable adhesive*, **partial** coverage rate
- ✓ PP, OPP, PE with water-releasable adhesive*, **full** coverage rate
- ✓ Paper with water-releasable adhesive*, **partial** coverage rate
- ✓ Paper with water-releasable adhesive*, **full** coverage rate
- ✗ Paper, PP, OPP, PE with adhesive that is not released during washing
- ✗ PVC
- ✗ Other plastic with a density > 1 (e.g. PET on clear PET, PETg, PS, PLA packaging)
- ✗ Multi-layer with aluminium layer (e.g. PP/aluminium, paper/aluminium)

On mono- or multi-material seal lid of d<1, without metal [if necessary](#)

- ✓ PP, OPP, PE and **partial** coverage rate
- ✓ PP, OPP, PE and **full** coverage rate
- ✓ Paper with water-releasable adhesive*, **partial** coverage rate
- ✓ Paper with water-releasable adhesive*, **full** coverage rate
- ✗ Paper with adhesive that is not released during washing
- ✗ PVC
- ✗ Other plastic with a density > 1 (e.g. PET on clear PET, PETg, PS, PLA packaging)
- ✗ Multi-layer with aluminium layer (e.g. PP/aluminium, paper/aluminium)

Designs/inks on labels

- ✓ Non-washable ink*
- ✗ Washable ink*
- ✗ Metallic ink

Size of the labels

→ **Restrict the coverage and size of associated elements** to maximise the chances of the pot or tray being detected at sorting centres

“Partial” coverage rate:

- For packaging > 500 mL: surface area of < 70%
- For packaging < 500 mL: surface area of < 50%



3

Reminder: the labels (element associated with the packaging body) should not disrupt recycling of the pot or tray body. If chemical recycling is used and they are made of PET they can be recycled.

*Washing at 60-80°C in alkaline conditions (with soda).

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

Pots and trays with a clear PET body (5/6)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Other elements *if necessary*

Unprinted transparent PET element

- ✓ Non-sealed/bonded or with water-releasable adhesive
- ✓ Sealed or bonded with adhesive that is not released during washing

Element of density < 1

- ✓ Non-sealed/bonded or with water-releasable adhesive

Sleeve

- ✓ Plastics $d < 1$ (e.g. PP, OPP, PE), partial coverage rate*
- ✓ Plastics $d < 1$ (e.g. PP, OPP, PE), full coverage rate*
- ✗ Other plastics $d > 1$ (e.g. PET, PETG, PS, PLA)
- ✗ PVC

Blister packs

- ✓ Non-bonded card
- ✗ Bonded card

Other

- ✗ RFID tag
- ✗ PVC
- ✗ Metal
- ✗ Coloured or printed PET
- ✗ Copolyester (PETG, PET-GAG, hot-fill PET)
- ✗ Thermoset plastics

Key

- ✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

For further details

Other associated element: absorbent pad

* Refer to the previous page for coverage rates. A full sleeve reduces capture efficiency at sorting centres.

Pots and trays with a clear PET body (6/6)

(based on the latest information available to COTREP in 2025)

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RECAP – IDEAL SOLUTIONS

1

Pot or tray body

Mono-PET or APET, colourless or transparent blue, no printing

2

Closure system, if necessary

Non-sealed/bonded cover



If possible use: unprinted transparent PET or PP or PE

Option: other plastic of density < 1

Unprinted transparent PET seal lid peelable and/or with water-releasable adhesive



Seal lid of density < 1 mono- or multi-material ⁽¹⁾, without metal peelable and/or with water-releasable adhesive



For further information – Seal lid assembly

Heat sealing: polyester-based sealing layer that remains mainly on the seal lid

Bonding: adhesive that is water-releasable at 60-80°C ⁽²⁾ in alkaline conditions and/or remains mainly on the seal lid

Designs on closure system, if necessary

Non-washable ink ⁽²⁾

3

Label on body or cover, if necessary

Paper or PP, OPP, PE with water-releasable adhesive and non-washable ink ⁽²⁾ – partial coverage rate

⁽¹⁾ Examples: seal lid with several plastic resins, plastic/paper.

⁽²⁾ 60-80°C in alkaline conditions (with soda).

Pots and trays with a clear PET/PE body (1/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Pot or tray body

Materials and barriers

PET or copolyester⁽¹⁾, associated with another resin (e.g. PET/PE, PP/PET/PE) in a proportion of:

✔ <20% ✔ >20%

PET or copolyester⁽¹⁾ associated with a non-plastic material (cardboard, wood, ceramics metal, etc.) in a proportion of:

✔ <20% ✘ >20%

- ✔ EVOH barrier with tie layer
- ✔ PA barrier
- ✘ PVDC barrier
- ✘ Other barriers and resins (multi-layer, blends)
- ✘ PVC or PET associated with PVC

Colorants

- ✔ Transparent colourless
- ✔ Transparent blue
- ✘ Other transparent, opaque and metallic colours⁽²⁾
[see coloured PET sheet](#)

Additives (gases, fillers, agents) and density⁽³⁾

- ✔ Surface silicone for unstacking
- ✔ UV stabilisers, AA blockers, optical brightener
- ✘ Expanded or mineral-filled PET⁽⁴⁾ – [see coloured PET sheet](#)

Inks⁽⁵⁾ and designs on clear PET/PE body

- If possible: no printing or laser marking**
- ✔ Direct printing



1

Key

✔ Compatible ✔ Compatible but to be avoided ✘ Non-compatible and/or disruptive

For further details

Fillers and density

Designs

Reminder

It will only be possible to integrate **clear PET/PE pots and trays** into the recycling streams if they **are well designed** and once the **designated streams have been set up**.

⁽¹⁾ Copolyester: PETG, PET-GAG, hot-fill PET. For PET, copolyester and clear PET/copolyester, refer to section “[Pots and trays with a clear PET body](#)”.

⁽²⁾ Coloured and opaque packaging items are not currently included in the stream. Research is underway to assess the possibility of including them in the medium/long term.

⁽³⁾ Limit additives, particularly halogenated elements.

⁽⁴⁾ Mineral-filled, expanded PET materials are not translucent.

⁽⁵⁾ EuPIA Best Practices

Pots and trays with a clear PET/PE body (2/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS

Choice of closure systems *if necessary:*



Cover ⁽¹⁾

If possible use: unprinted transparent PET

Copolyester⁽³⁾ or PET associated with copolyester⁽³⁾,

✓ unprinted transparent ✓ coloured or printed

PET or copolyester⁽³⁾ associated with another resin (e.g. PET/PE)

✓ unprinted transparent ✓ coloured or printed

✓ coloured or printed PET ✗ Wood

✓ Metal ✗ Thermoset plastics

✓ Other plastics (e.g. PP, PS) ✗ PVC



Seal lid

PET seal lid (peelable or not)

✓ unprinted transparent ✓ coloured or printed

Multi-material seal lid containing PET (peelable or not)

✓ unprinted transparent ✓ coloured or printed

✓ Other PET-free seal lid (peelable or not)

✓ Aluminium seal lid (peelable or not)

✗ Seal lid containing PVDC

✗ Thermoset plastics

Skin film⁽²⁾

PET skin film (peelable or not)

✓ unprinted transparent ✓ coloured or printed

Multi-skin film containing PET (peelable or not)

✓ unprinted transparent ✓ coloured or printed

✓ Other PET-free skin film (peelable or not)

✗ Skin film containing PVC or PVDC

✗ Thermoset plastics

Find out more

Assembly via heat sealing

Preferably apply a polyester-based sealing layer that remains mainly on the seal lid

Assembly via bonding

Preferably use an adhesive that is water-releasable and/or remains mainly on the seal lid

Designs/inks on the closure system

✓ No printing

✓ Other inks

Reminder

It will only be possible to integrate **clear PET/PE pots and trays** into the recycling streams if they **are well designed** and once the **designated streams have been set up**.

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

⁽¹⁾ Analysis based on the principle that a cover is not separated from the pot. Studies could be carried out to assess sorting potential.

⁽²⁾ Not much information is available about skin films yet. A specific study needs to be carried out.

⁽³⁾ Examples: PETG, PET-GAG, hot-fill PET, PCTA, PCTG

Pots and trays with a clear PET/PE body (3/4)

(based on the latest information available to COTREP in 2025)

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RECOMMENDATIONS



Label affixed to the body or cover *if necessary*

Label materials

- PET: coverage rate ✓ partial ✓ full
- Paper: coverage rate ✓ partial ✓ full
- PP: coverage rate ✓ partial ✓ full

✗ PVC

Sleeve

- PET, PETg: coverage rate ✓ partial ✓ full
- PP, OPP, PE: coverage rate ✓ partial ✓ full
- PS: coverage rate ✓ partial ✓ full

✗ PVC

Designs/inks on labels

- ✓ No printing
- ✓ Other inks (avoid inks containing chlorine or nitrogen)

Size of labels and sleeves

→ **Restrict the coverage and size of associated elements** to maximise the chances of the pot or tray being detected at sorting centres.

“Partial” coverage rate:

- For packaging > 500 mL: surface area of < 70%
- For packaging < 500 mL: surface area of < 50%

Other

- ✓ Non-bonded card for blister
- ✗ RFID tag

Reminder: as chemical recycling is used, PET labels can be recycled. Non-PET labels will not be recycled: they should not disrupt recycling of the pot or tray body.

Key

✓ Compatible ✓ Compatible but to be avoided ✗ Non-compatible and/or disruptive

For further details

Other associated element: absorbent pad

Reminder

It will only be possible to integrate **clear PET/PE pots and trays** into the recycling streams if they **are well designed** and once the **designated streams have been set up**.

Pots and trays with a clear PET/PE body (4/4)

(based on the latest information available to COTREP in 2025)

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RECAP – IDEAL SOLUTIONS

1

Pot or tray body

PET or copolyester associated with less than 5% of another resin (PET/PE, PP/PET/PE, etc.), colourless or transparent blue with no printing

2

Closure system, *if necessary*

Cover



If possible use: unprinted transparent PET

PET seal lid (peelable or not)



Reminder: it will only be possible to integrate **clear PET/PE pots and trays** into the recycling streams if they are **well designed** and once the **designated streams have been set up**.

Designs on closure system, *if necessary*

No printing or other inks (avoid inks containing chlorine or nitrogen)

3

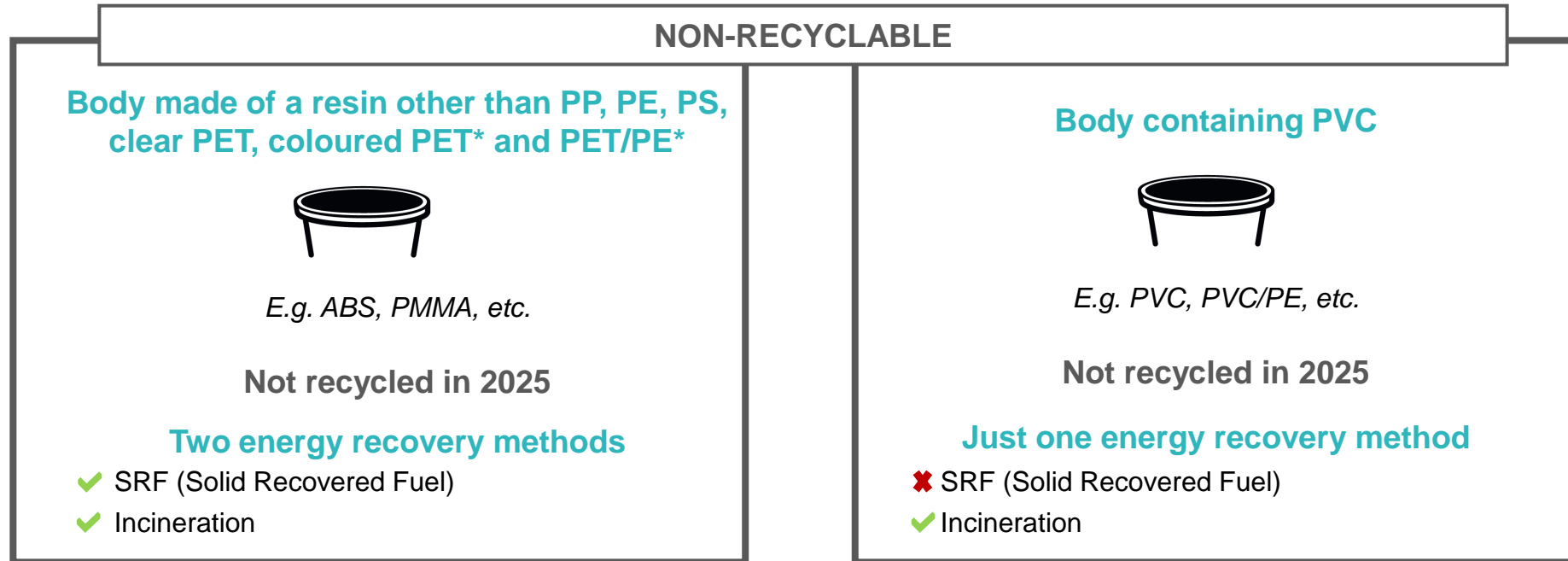
Label on body or cover, *if necessary*

PET, partial coverage rate

Pots and trays with a body made of PVC, ABS, etc.

(based on the latest information available to COTREP in 2025)

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Recommendation

Replace with a PP, PE, PS, clear PET, coloured PET* or PET/PE* resin

* Streams under development/review

Can other recycling streams be envisaged?

PEF, PHA, etc. New streams could emerge if the following conditions are met:

- There are sufficient quantities of material to open an industrial stream
- The material is collectable, sortable and recyclable with value-added outlets
- The material must have an economic and environmental benefit

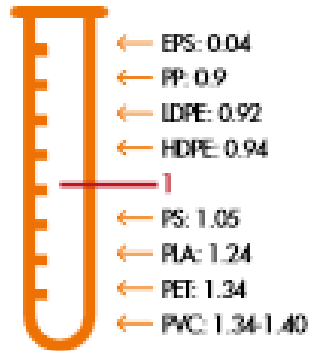


Focus on changes in density

(based on the latest information available to COTREP in 2025)

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The density of the packaging body differs according to the resin used:



For mechanical recycling, all regeneration plants handling plastic packaging in Europe sort waste by density on their regeneration lines to purify the material to be recycled. Concerning recycling of French streams:

- For PET, PP and PE, sink-float tanks with a density of 1 are used.
- For PS, a sink-float tank with a density of 1.1 is used.

Consequences of a change in packaging body density

- ❑ The use of gases, blowing agents and fillers may alter the density of the pot or tray above or below the flotation limit (1 or 1.1 according to the recycling stream) and compromise recycling. For example:
 - Expanded PET ($d < 1$) floats and may not be recycled
 - Mineral-filled PP or PE ($d > 1$) sinks and may not be recycled
 - Mineral-filled PS ($d > 1.1$) sinks and may not be recycled
- ❑ Even if the density does not go above or below the tank flotation level, the presence of gases, blowing agents and fillers in the plastic could also have an impact on sorting or regeneration and/or on the mechanical and rheological properties of the recycled material. This impact on the properties of the recycled material has not been evaluated by COTREP to date.



Focus on dark colorants

(based on the latest information available to COTREP in 2025)

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Explanation

The use of certain **colorant solutions** in dark, rigid plastic packaging, e.g. certain solutions containing carbon black, **can render dark packaging items undetectable by optical sorting** at sorting centres. These pigments absorb infrared radiation, which means that the packaging returns no signal and therefore cannot be identified at sorting centres and directed towards a recycling stream.



Colours considered as light. Detection possible with current knowledge.



Colours considered as dark. Detection unlikely or highly unlikely.



Find out more

Further information is available at:

<https://www.cotrep.fr/etude-technique/>

<https://www.citeo.com/le-mag/emballages-sombres-en-plastique-comment-les-rendre-detectables-en-centre-de-tri-pour-mieux/>

- A **standard testing method** for validating the detectability of your colorant solutions and/or dark packaging items
- **Tried-and-tested solutions** available



Focus on packaging with a coloured PET and PET/PE body

(based on the latest information available to COTREP in early 2025)

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Context

- ❑ The tonnage of **pots and trays made of coloured PET and PET/PE, including CPET**, is low (~12kT placed on the market). There is currently no **dedicated recycling stream** for this packaging.
- ❑ In early 2021, COTREP published recommendations for pots, trays and other coloured and opaque rigid PET items. These recommendations were developed based on mechanical recycling of coloured PET trays.
- ❑ Approximately 4% of coloured PET pots, trays and other rigid packaging items placed on the market are currently recycled together with coloured PET bottles; this concerns mono-PET packaging without seal lids. The **recommendations available on COTREP's website remain valid to prevent a negative effect on coloured PET bottle recycling**.
- ❑ Where packaging items with a coloured PET/PE body are concerned, these items are currently not recyclable and are therefore rejected. COTREP has not yet issued recommendations for this packaging.

Study underway

- ❑ Pots, trays and **other rigid coloured PET and PET/PE items are undergoing assessment to envisage a potential switch to “recyclable”**, under the terms of the QCE Decree by 2027-2028. This consists of:
 - 1/ Assessing the technical feasibility **of channelling this packaging to recycling** in sorting and secondary sorting centres.
 - 2/ Checking the technical and economic feasibility of **recycling this packaging in recycling streams** under development, probably for chemical recycling.
- ❑ Once it has confirmation of a recycling stream for this packaging, COTREP will update its recommendations for coloured PET and publish its recommendations for coloured PET/PE.

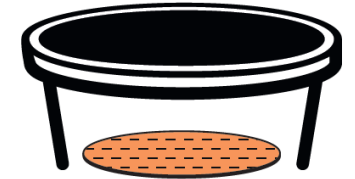


Focus on the impact of absorbent pads

(based on the latest information available to COTREP in 2025)

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A series of tests performed by COTREP assessed the impact of absorbent pads on sorting and regeneration (particularly on clear PP and PET trays).



Summary of recommendations

- ❑ Absorbent pads are associated elements and are not intended to be recycled. They should be designed so as **not to disrupt recycling of the tray** on which they are placed, particularly during mechanical recycling.
- ❑ In terms of capture at sorting centres, tests show that **an absorbent pad with a coverage rate of under 70% facilitates tray channelling** to the correct recycling stream.

Recommendations for cellulose/PE absorbent pads

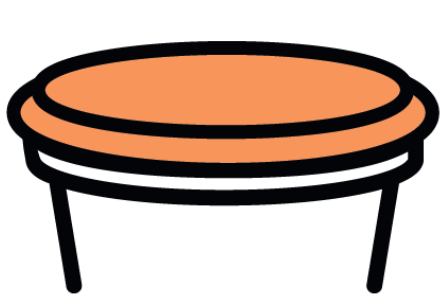
If possible: no adhesive or sealing

- ✓ Absorbent pad on PP tray, with or without adhesive, released during washing or not
- ✓ Absorbent pad on PS tray
- ✗ Absorbent pad on clear PET tray
- ✓ Absorbent pad on clear PET/PE tray
- ? Absorbent pad on coloured PET or PET/PE tray: [see coloured PET sheet](#)

Definitions

- ❑ **Multi-material packaging** is the combination of at least two materials from the following six: plastic, paper/cardboard, cartons, glass, steel, aluminium.
- ❑ **A multi-resin packaging item** is a mono-material plastic packaging item (100% plastic) composed of several plastic resins (e.g. PET/PE trays).
- ❑ **A mono-resin or “mono” packaging item** is a mono-material plastic packaging item (100% plastic) composed of a single plastic resin.

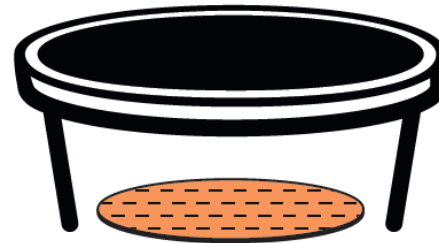
- ❑ **Associated elements** are packaging elements connected to the main element (i.e. the body) and not automatically separated from the main element during consumption of the product and/or sorting by consumers. For pots and trays, the main associated elements are **covers, seal lids, absorbent pads** and **labels**. Inks and adhesives are associated materials.



Cover



Seal lid



Absorbent pad



Label

Definitions

❑ **Seal lid:** refers to the “**flexible top film**” attached to the pot or tray.

NB: the seal lids available on the market are complex/multi-layer elements. “Mono-PET” seal lids are also multi-layer (“PET/sealing agent”) made up of several PET grades.

- ❑ A **non-peelable seal lid** is a seal lid in which the part sealed to the tray cannot be separated by the consumer. The seal lid and the tray are joined together too tightly (*i.e. the two parts are melted together*).
- ❑ A **peelable seal lid** is a seal lid that, once sealed to the tray, may be removed from it by the consumer (*i.e. the sealed part of the lid can also be detached from the tray*).

There are two types of peelability:

- **Adhesive peelability:** the seal lid is completely separated from the tray. Nothing remains on the tray, or at the most small residues of sealing agent or adhesive on the tray (*preferred*)
- **Cohesive peelability** or peelability that involves “**breaking the sealing layer**”: the seal lid is separated from the tray but a layer of the lid remains on the tray



Non-peelable seal lid



**Peelable seal lid
Adhesive peelability**



**Peelable seal lid
Cohesive peelability**

Definitions

❑ **Adhesive** refers to:

- The adhesives used to assemble the associated elements (labels, absorbent pads, etc.)
- The adhesives added to a heat-sealed seam to attach a seal lid to a preformed tray

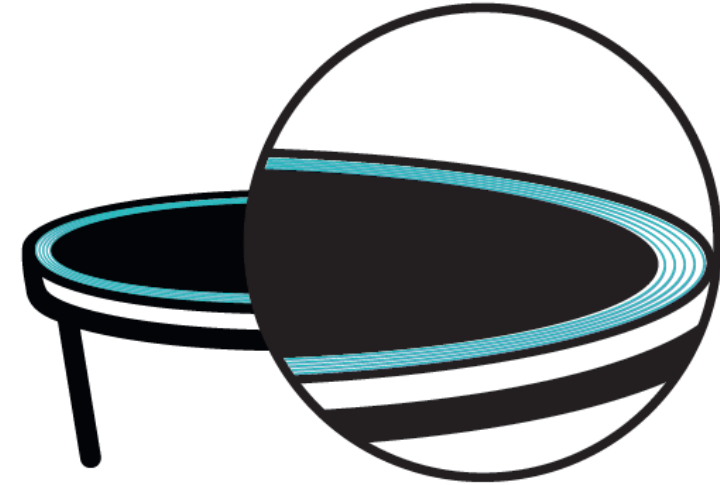
Please note, the word “adhesive” does not refer to:

- **Sealing agents** (i.e. the sealing layer) used on some seal lids to assemble/seal them to the tray.
- The “**tie layer**” between two layers of multi-layer packaging (e.g.: *PE/tie layer/EVOH/tie layer/PE*)

❑ **Seal lid assembly:**

There are two types of seal lid/tray assembly:

- **Bonding**: firstly, an adhesive is added to the edge of the tray, then the lid is sealed to the tray by applying heat.
- **Heat sealing**: no adhesive is added between the tray and the seal lid. The seal lid and tray are joined together by applying heat to the **sealing agent** initially present on the seal lid.



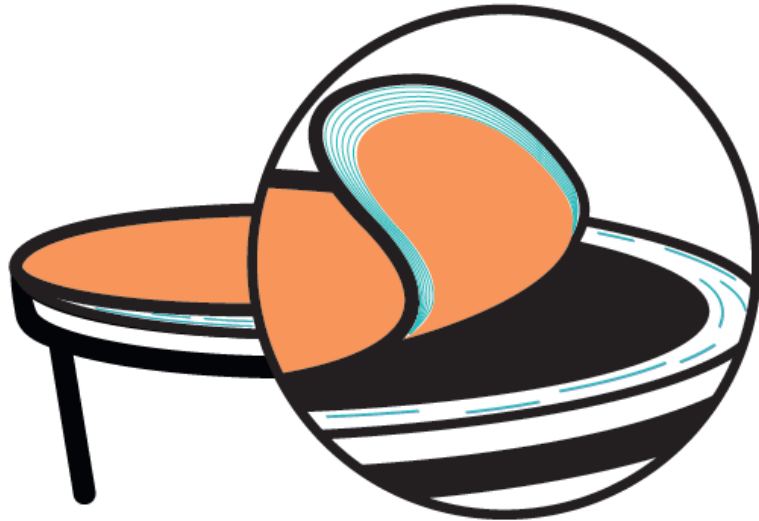
Tray before bonding



Tray before heat sealing

Definitions

- ❑ **“Leaving no residue on the packaging”** means “which leaves as little adhesive/sealing agent residue as possible on the pot or tray”



Adhesive residues
on the tray



Sealing agent residues
on the tray

- ❑ **IML or in-mould labelling:** a pre-printed label that is placed directly into the packaging mould before it is manufactured by injection moulding, blow moulding or thermoforming. The label is an integral part of the packaging after the fusion between the plastic resin and the label. No adhesive is used in this process.