

Choice of plastic packaging materials - general



Preferred

Material

- Recycled PET: for food
- Recycled PP: for non-food
- Recycled HDPE or LDPE: for non-food
- Use monomaterial, best no coatings

Color

- Use transparent plastics whenever possible
- PET: opaque (white) is not transparent
- HDPE / PP: light coloured plastics is allowed when necessary but not preferred

Labels / Adhesives

- Labels not bigger than sizes set per packaging format. Best: <50% coverage.
- Wash-off adhesives soluble in water or alkali <60 C°

Ink

- Avoid inks whenever possible
- 2nd best: water-soluble, non-toxic inks (follow EUPIA guidelines)

Recyclability

- Add disposal instructions on package

Best packaging = no packaging. Apply lasering / dispensing systems. 2nd best option: More concentrated / bigger volumes to reduce material

Alternatives to plastics, like glass / paper / aluminium may seem appealing, but may have higher environmental impact. Check with sustainability department when in doubt!



Alternative

Material

- Bio-PET (e.g. PEF): for food
- Bio-PE or bio-PP: for food and non-food
- Sourcing preference:
 - 1) from waste streams from EU
 - 2) from sugar beet, potatoes, corn and wheat
 - 3) from sugarcane from Brazil

Color

- Light-coloured

Labels / Adhesives

- C-label design with non-sticky adhesive, so customer removes entire C-label upon opening

Coatings

- AlOx / SiOx

Different meanings & impacts of 'bioplastics':

	Non-biodegradable	Biodegradable**
Fossil-based	PLASTIC Conventional plastic like PE, PP, PE	BIOPLASTIC PBAT, PCL
Bio-based*	BIOPLASTIC PE based on sugar cane Also PEF, PA	BIOPLASTIC PLA, PHA

*Be careful regarding feedstock used that could be competing with food consumption or can cause deforestation & loss of biodiversity. Ask supplier for detailed information about the feedstock used.

**Always requires certain conditions of temperature, humidity, etc.



Avoid

Material

- Biodegradable plastics, like PLA
- Oxo-degradable plastics
- PVC / PVDC
- PS / EPS
- PC
- Fossil-based plastics
- Multimaterial/multilayers, like ALU / PE / PET
- Aluminum trays or foils

Color

- Fully printed / non-transparent plastics

Labels / Adhesives

- Metallized labels
- Metallized adhesives

Coatings

- EVOH
- Dispersion coating (applied after printing)
- More than 5% in total

Ink

- Inks that are hazardous or toxic

PET bottles



Preferred

Material

- rPET for food (beverages)

Color

- Unpigmented or transparent

Labels / Adhesives

- Labels or sleeves: rPE or rPP that can be easily separated from the bottle at sorting companies, if:
 - Bottles < 500ml: <50% coverage
 - Bottles > 500ml: <70% coverage
- Wash-off adhesives soluble in water or alkali <60 C°

Ink

- Non toxic (follow EUPIA guidelines : light-coloured, inflammable and soluble ink)
- No ink: laser marking

Caps

- PE or PP cap, best stuck to bottle

Recyclability

- ReUsable containers will delay need for recycling



Alternative

Material

- Biobased plastics, best from waste streams from Europe

Color

- Light-blue transparent

Labels / Adhesives

- Uncoated paper labels without fiber-loss (non-pulping)
- All wash-off self-adhesives, soluble in water or alkali 60-80°C



Avoid

Color

- All other colors

Labels / Adhesives

- PP or PET covering >50% (<500 ml) or 70% (>500 ml) of the face
- PVC, aluminum, metalized materials or labels
- Heavily inked sleeves, in-mould labels and non-detachable PE or PP labels
- Fully sleeved bottles
- Adhesives which are not removable by water or alkali

Ink

- Inks that are bleeding, hazardous or toxic
- Direct printing



HDPE & PP bottles



Preferred

Material

- rHDPE or rPP for non-food

Color

- Unpigmented or transparent

Labels / Adhesives

- Water-soluble labels
- Labels, in-mould labels or sleeves: in the same material as the bottle, no matter what the size is
- Wash-off adhesives soluble in water or alkali <60 C°

Ink

- Non toxic (follow EUPIA guidelines : light-coloured, inflammable and soluble ink)
- No ink: laser marking

Caps

- Of the same material, best stuck to bottle
- Unpigmented or transparent

Recyclability

- ReUsable containers will delay need for recycling



Alternative

Material

- Biobased plastics, best from waste streams from Europe

Color

- Light-coloured

Labels / Adhesives

- In-mould or sleeve
- PE-label (PP bottle), PP-label (HDPE bottle), PET-label:PE (PP bottle);
 - Bottles < 500ml: <50% coverage
 - Bottles > 500ml: <70% coverage



Avoid

Color

- Dark-coloured
- Black

Labels / Adhesives

- Paper labels
- PP or PET covering >50% (<500 ml) or 70% (>500 ml) of the face
- PVC, aluminum, metalized materials or labels
- Fully sleeved bottles
- Adhesives which are not removable by water or alkali

Ink

- Inks that are bleeding, hazardous or toxic
- Heavily inked sleeves



Trays (for fish / meat / cheese / vegetarian / etc.)



Preferred

Material

- rPET

Color

- Unpigmented or transparent

Labels / Adhesives

- Small label from PE or PP, or print info on the lidding film
- Insert pads: integrated in the tray design
- Wash-off adhesives soluble in water or alkali <60 C°

Cover

- Lidding film made from: rPET, PE or PP

Ink

- Non toxic (follow EUPIA guidelines : light-coloured, inflammable and soluble ink)
- No ink: laser marking



Alternative

Material

- Delaminating PET-GAG or PET-PE (layered); this is not recyclable, but does not hinder the recycling process
- If necessary a 'PET based oxygen scavenger' can be added, with limited yellowing after heating

Color

- Light-blue transparent

Labels / Adhesives

- Uncoated paper labels without fiber-loss (non-pulping)
- All wash-off self-adhesives, soluble in water or alkali 60-80°C
- Insert pads that release easily without leaving adhesive residues

Cover

- PET based oxygen scavenger can be added



Avoid

Material

- PLA, PS, expanded PET or CPET, Aluminum
- Brighteners, blockers, stabilisers, anti-statics, anti fogging
- Multi-layers with nylon or EVOH

Color

- All other colors (black, coloured, opaque)

Labels / Adhesives

- Big labels, made from pulping paper or from PET
- Insert pads that leave a residue
- Adhesives which are not removable by water or alkali

Cover

- Lidding film from a laminate (e.g. PET-PE) or films heavier than water

Ink

- Inks that are bleeding, hazardous or toxic
- Direct printing on PET tray or film

