Design For Recycling

GUIDELINES for packaging

*Polymer resin can be either fossil- or bio-based, virgin or recycled.

CIRCPACK by VEOLIA

Material:

PET-bottles Clear

- PET-trays
- PP rigids
- PP flexibles
- PE rigids
- PE flexibles
- PS
- Paper & cardboard
- Beverage cartons
- Glass
- Steel
- Aluminium

		Yes - Full compatibility	Conditional - Limited compatibility	No - Low (or no) compatibility
Main body	Material*	PET		PLA; PVC; PS; PETG
	Colours	Transparent clear, transparent light blue		Other transparent colours; Opaque; Fluorescence; Metallic
	Size			< 4 cm (compacted); > 5 liter content
	Product residues	A if the index Easy-to-empty is < 5%; B if the index is < 10%	C if the index Easy-to-empty is < 15%	D if index Easy-to-empty <20%; E < if index is 25%; F if index is > 25%
	Barrier	SiOx plasma coating	Carbon plasma-coating; PA-MXD6 multilayer with <5wt% PA-MXD6 and no tie layers; PGA multilayer; PTN alloy	PA-MXD6 multilayer with >5wt% PA-MXD6 or with tie layers; Monolayer PA-MXD6 blend; EVOH
	Additives		UV stablilisers; Acetaldehyde (AA) blockers; Optical brighteners; Oxygen scavengers	Bio-/oxo-/photodegradable additives; Nanocomposites
Attachments	Closure Systems	PE (with density <1 g/cm³); PP (with density <1 g/cm³)		Materials and blends with density >1 g/cm³ (e.g. highly filled PE, metals,...); Non-detaching or welded closures
	Liners, Seals, Valves	PE; PE + EVA; PP; TPO (all with a density < 1 g/cm³); TPS (with density < 0.95 g/cm³)	Foamed PET (all with a density < 0.95 g/cm³); Floatable silicone (with density < 0.95 g/cm³)	Materials with density >1 g/cm³ (e.g. PVC, silicone, metals)
	Other Components	Components which are separated by grinding and float/sink - all with density <1 g/cm³; Unpigmented PET		Materials with density >1 g/cm³ (e.g. metal, RFID tags); Non detaching or welded components; Coloured PET
Decoration	Inks	Non-toxic (according to EUPIA guidelines)		Inks that bleed; Toxic or hazardous inks; Metallic inks
	Labels	in PE; PP; OPP; EPS; foamed PET (density <1 g/cm³), with size that does not hinder the recognition of underlaying PET-polymer	Lightly metallized labels; Paper labels without fiberlosses	Labels which hinder recognition of underlaying PET-polymer; with density >1 g/cm³ (PVC; PS; PET; PETG; PLA); Metallized labels; Non-detaching or welded labels; Paper labels with fibreloss; Foamed PETG labels; PET labels with washable inks
	Adhesives for labels	Alkali/water releasable adhesive at 60-80°C without reactivation	Hot-melts; Pressure-sensitive labels	Alkali/water soluble adhesive; Alkali/water non-soluble or non-releasable adhesive at 60-80°C
	Sleeves	Sleeves in PE; PP; OPP; EPS; foamed PET; LDPET (all with density <1 g/cm³), with a size that does not hinder* the recognition of the underlaying PET-polymer	Full sleeves translucent for IR detection in PE; PP; OPP; EPS; foamed PET; LDPET; all with density <1 g/cm³	Sleeves which hinder the recognition of the underlaying PET-polymer; with density >1 g/cm³ (PVC; PS; PET; PETG); Foamed PETG sleeves; PET sleeves with washable inks
	Tamper Evidence Wrap	PE; PP; OPP; EPS, Foamed PET (all with density <1 g/cm³)		Materials density >1 g/cm³ (metal; PVC; PS; PET, PETG); Metallised materials