

Design For Recycling

GUIDELINES for packaging

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

CIRCPACK
by **VEOLIA**

Material:

•PET-bottles

PET-trays

Clear

•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		Any PET based multilayer material including PET/PE; PLA; PVC; PS; PETG; C-PET; PET-GAG; Expanded PET
	Material composition	A when PET content is > 95%; B when PET content is > 90% and all packaging features are FULLY compatible with recycling	C when PET content is > 70% and all packaging features are FULLY compatible with recycling	D when PET content is > 50%; E when PET content is > 30%; F when PET content is < 30%
	Colours	Transparent clear, transparent light blue		Other transparent colours; Opaque; Fluorescence; Metallic
	Size		Items compacted < 5 cm	Items compacted < than 2 cm
	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 <20%; E < if index 25%; F if index > 25%
	Barrier	PET based oxygen scavenger without yellowing effect after EPBP oven test	PET based oxygen scavenger with limited yellowing effect after EPBP oven test	EVOH; PA; any other barrier; any other oxygen scavenger
	Additives	Silicone surface coating (on coating area); Antiblocking masterbatch (max 3%)	UV stabilisers; AA blockers; optical brighteners; antiblocking masterbatch (> 3%); anti-stat agents; antiblocking agents; anti-fogging agents (on coating area)	Bio-/oxo-/photodegradable additives; Nanocomposites
Attachments	Closure Systems; Lidding films	Unprinted PET; Floating plastics with density < 1 g/cm ³ and easily removal from the tray and without glue residuals; Foamed PET based films where foamed structure is not getting destroyed @90°C; SiOx and AluOx plasma for barrier		Any other films
	Other Components	Inserts in HDPE / LDPE / PP like Soaker pads, bubble pads (should be completely removable, leave no traces and density <1 g/cm ³)	Paper & cardboard not losing fibres	PVC / PS / EPS / PU / PA; PC/PMMA; Thermoset plastics; Metals; Paper & cardboard losing fibres
Decoration	Inks	Non-toxic (according to EUPIA guidelines)		Inks that bleed; Toxic or hazardous inks; Metallic inks
	Labels	Labels in PE; PP; OPP (all with density <1 g/cm ³ and also in the more heavily printing area), with a size that does not hinder* the recognition of the underlying PET-polymer (ie < 30% coverage)	BPA-free paper labels without fibre loss during recycling process	Plastic labels with density > 1 g/cm ³ ; Paper labels with fibre loss during recycling process; Paper labels containing BPA; Non floating paper labels
	Adhesives for labels	100% removable adhesives leaving no adhesive residuals on flakes at 70°C	100% removable adhesives leaving no adhesive residuals on flakes at 85°C	Any other adhesives
	Adhesives on other parts than lidding film and labels	Alkali/water soluble and alkali/water releasable adhesives at 60-80°C without reactivation	Full sleeves translucent for IR detection in PE; PP; OPP; EPS; foamed PET; LDPET; all with density <1 g/cm ³	Any other adhesive
	Direct Printing	Laser marked print	Printed production or expiry date	Any other direct printing