

# Design For Recycling

## GUIDELINES for packaging

\* A removable label is a label resulting in a removal efficiency equal or higher than 90% by grinding and washing the packaging. RecyClass is developing a standard testing procedure to prove label removability

The DfR guidelines for plastic packaging are 100% aligned with...  
For more info, please visit <https://recyclclass.eu/>

RecyClass

CIRCPACK  
by VEOLIA

### Material:

- PET bottle
- PET thermoform
- PP rigid
- PP flexible
- PE rigid
- PE flexible

### PS

Natural&white

- Paper & cardboard
- Beverage carton
- Glass
- Steel
- Aluminium



		Yes - Full compatibility	Conditional - Limited compatibility	No - Low (or no) compatibility
Main body	Material	PS		PS foamed < 1 g/cm <sup>3</sup> ; multilayers (PET, PETG, PVC, PLA, HDPE, PP...)
	Colours	Natural; white		Any other colour
	Size		Items compacted ≤ 5 cm	Items (compactd) ≤ 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	<a href="#">EVOH ≤ 5.0 wt% + PE-g-MAH tie layers and EVOH:Tie layers ratio ≤ 1</a>	<a href="#">EVOH &gt; 5.0 wt% + PE-g-MAH tie layers and EVOH:Tie layers ratio ≤ 1</a>	PA; PVdC
	Additives	Additives that are unavoidable in processing (stabilizers, antioxidants, lubricants...) and in formulation (SBS copolymer) with density that remains between 1 and 1.07 g/cm <sup>3</sup>	Mineral fillers (CaCO <sub>3</sub> , talc) not increasing density > 1.07 g/cm <sup>3</sup>	Additives increasing density > 1.07 g/cm <sup>3</sup> ; Bio/oxo/photodegradable additives
	Colours	Natural; White	Light colours	Black Inner layer, Black, Carbon Black, Other dark colours
	Closure Systems	PS	Removable PP and/or PE	PET; PETG; PVC; PLA; Paper; Any material with d >1 g/cm <sup>3</sup> ; Non detaching or welded closures; Aluminium; metal
Attachments	Liners, Seals and Valves	PS	PP; PE; EVA; TPE (non welded and with density <1 g/cm <sup>3</sup> )	PET; PETG; PVC; PLA; Any material with d >1 g/cm <sup>3</sup> ; Metal; metal foil; silicone
	Lids	PS	<a href="#">Removable aluminium lidding</a> ; Removable PP and/or PE	PVC; Non removable alu lidding; Paper; PET. Multilayer PET/paper or PET/PS; Any material with density >1 g/cm <sup>3</sup>
	Other Components	PS	Removable PP and/or PE	PET, PETG, PVC, PLA, metal, metal foil, paper; Any other material with density >1 g/cm <sup>3</sup>
	Inks	Non-bleeding inks compliant with EuPIA Exclusion Policy. Direct printing for production or expiry date	PE, PO (with density <1 g/cm <sup>3</sup> ) not hampering the NIR detection (sorting test mandatory)	Inks that bleed; Inks non-compliant with <a href="#">EuPIA Exclusion Policy</a> ; PVC binders
Decoration*	Facestock Label Material	Removable labels in PS	Removable labels in PP, PE (with density < 1 g/cm <sup>3</sup> ) not hampering the NIR detection (sorting test mandatory)	Non removable or partially removable labels; Labels that hinder the recognition of the PS; PET, PETG, PVC, PLA; Paper label; In-Mould-Labels; Metallised materials; Aluminium
	Adhesives for labels*	<a href="#">Removable labels in the recycling process</a>		Not removable in the recycling process
	Sleeves	Sleeves in PS; <a href="#">Self-separable plastic and cardboard sleeves under mechanical pressure</a> (sorting test mandatory)		Sleeves that hinder PS recognition; Sleeves in non PO materials with d <1 g/cm <sup>3</sup> ; PET, PETG, PVC, PLA; Cardboard sleeves; Metallised materials; Heavily inked sleeves; Alu
	Other Decorative Technologies	Laser marked; Production or best-before date		