RecyClass **Guideline test**

	FULL COMPATIBILITY	LIMITED COMPATIBILITY	NON-COMPATIBILITY
MATERIAL COMPOSITION (AMOUNT OF PE IN THE PACKAGING)	A >= 95%, B >= 90% and all packaging features are FULLY compatible with recycling	C >= 70% and all packaging features are FULLY compatible with recycling	D >= 50%, E >= 30%, F <= 30% and all packaging features are FULLY compatible with recycling
DESCRIPTION (TEST PROTOCOL)	Materials that passed the testing protocols with no negative impact OR materials that have not been tested (yet), but are known to be acceptable in PE recycling	Materials that passed the testing protocols if certain conditions are met OR materials that have not been tested (yet), but pose a low risk of interfering with PE recycling	Materials that failed the testing protocols OR or materials that have not been tested (yet), but pose a high risk of interfering with PE recycling
DESCRIPTION (METHODOLOGY)	In case of at least one limited compatibility one penalty is applied, lowering the recyclability class from A to B or from B to C	In case of at least one limited compatibility one penalty is applied, lowering the recyclability class from C to D	In case of at least one limited compatibility one penalty is applied, lowering the recyclability class from D to E or from E to F
MATERIAL*	HDPE; Multilayer PE with HDPE prevalence (LLDPE, LDPE, MDPE)		Multilayers HDPE with PLA; PVC; PS; PET; PETG
COLOURS	Natural (clear)	Light colours	Black Inner layer; Black; Carbon Black; Other dark colours
SIZE		Items compacted < 5 cm	Items compacted < 2 cm
PRODUCT RESIDUES (EASY TO EMPTY INDEX)	A if the index is < 5%; B if the index is < 10%	C if the index is < 15%	D if the index is < 20%; E < if the index is 25%; F if the index is > 25% $$
BARRIER	EVOH < 6.0%wt + PE-g-MAH tie layers with MAH > 0.1%wt and EVOH:tie layers ratio <= 2; Enkase (fluorination)		EVOH > 1% with any other tie layers; PA; PVDC; Aluminium
ADDITIVES	Additives that are unavoidable in processing (stabilizers, antioxidants, lubricants, nucleating agents, peroxides) and density remains < 0,97 g/cm ³	Mineral fillers (CaCO3, talc) not increasing density more than 0,97 g/cm ³	Additives changing the material density > 1 g/cm³; Flame-retardant additives, plasticizers; Bio-/oxo-/photodegradable additives
CLOSURE SYSTEM	HDPE; LDPE; LLDPE; MDPE	PP; PET; PETG; PLA; PS (all with a density > 1 g/cm³); Removable aluminium lidding	Non-PO and/or foams with density < 1 g/cm³; Aluminium; Metal; PVC
LINERS, SEALS AND VALVES	HDPE; LDPE; LLDPE; MDPE; TPE-PE	PP; TPE-PP; PET, PETG, PLA, PS (all with a density > 1 g/cm³); Removable silicon with a density > 1 g/cm³	Non-PO and/or foams with density < 1 g/cm³; Any other TPE; Aluminium; Metal; Foiled paper; PVC
OTHER COMPONENTS	HDPE, LDPE, LLDPE, MDPE	PP; PET; PETG; PLA; PS all with density > 1 g/cm³	Aluminium; PVC; Glass components; Foams with density $\sim 1~{\rm g/cm^3}$
INKS	Non toxic following the EuPIA Guidelines		Inks that bleed; Toxic or hazardous inks; PVC binders
LABELS MATERIALS (PSL, WET-GLUE LABELS, WRAP-AROUND LABELS, IML)	Labels in PE (all with density < 1 g/cm³)	Labels in PP, PO (with density < 1 g/cm³); Labels in PET, PETG, PLA, PS (all with density > 1 g/cm³); Labels in Paper without fibreloss; PO-foamed labels	Labels that hinder the recognition of the PE; Labels in non PO-materials with density < 1 g/cm³; Paper labels with fibreloss during recycling process; In-Mould-Labels; Aluminium; Metallised labels; PVC
ADHESIVES FOR LABELS	Water soluble adhesive (@ less than 40° C); Water releasable adhesive (@ less than 40° C)		Non-water soluble adhesive (@ less than 40°C); Non-water releasable adhesive (@ less than 40°C)
SLEEVES	Sleeves in PE (all with density < 1 g/cm³); Self-separable plastic and cardboard sleeves under mechanical pressure (<u>sorting test</u> mandatory)	Sleeves in PO (with density < 1 g/cm³); Sleeves in PET, PETG, PET-C, PLA, PS (all with density >1 g/cm³); Cardboard sleeves without fiberloss (<u>sorting test</u> mandatory)	Sleeves that hinder the recognition of the PE; Sleeves in non PO-materials with density < 1 g/cm³; Cardboard sleeves with fibreloss during recycling process; Aluminium; Metallised sleeves; Heavily inked sleeves; PVC
DIRECT PRINTING	Laser marked; Production or best-before date		Any other direct printing
OTHER DECORATIVE TECHNOLOGIES		Electroplating on attachments (with density > 1 g/cm³)	Electroplating on attachments (with density < 1 g/cm³)

RECYCLED CONTENT: No change in the recyclability assessment. A separate 'Recycled Plastics Traceability Certification' based on a Chain of Custody approach is available with RecyClass

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

^{**} Decorative technologies must not hinder the recognition of the underlaying PE-polymer. Features as size, print, mass colouration and/or barrier might require to perform a Sorting Evaluation Protocol. Known misleading features are listed on the RecyClass Methodology and the following size indications can be considered to ensure the recognition of PE:

Size of non-PE detectable surfaces on containers > 500 ml: < 70% coverage
 Size of non-PE detectable surfaces on containers < 500 ml: < 50% coverage