

The same design for recycling recommendations apply to natural and white plastic packaging, to preserve the high-value of these materials and to ensure the availability of both white and natural recycled plastic on the markets. **However, natural and white packaging should be sorted into two distinct streams and recycled separately.**

	YES - FULL COMPATIBILITY	CONDITIONAL - LIMITED COMPATIBILITY	NO - LOW COMPATIBILITY
MATERIAL COMPOSITION (TOTAL AMOUNT OF PE & PP 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% 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 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
PACKAGING	MATERIALS* HDPE; Multilayer PE with HDPE prevalence (LLDPE, LDPE, MDPE) <i>TPO <= 10 % (full olefinic or aliphatic structure)</i>	<i>PP <= 10%</i>	Multilayers HDPE with PLA, PVC, PS, PET, PETG; <i>10% <PP<= 30% (-2 classes); PP > 30% (-3 classes); TPO (containing rubber, e.g. EPDM)</i>
MAIN BODY	COLOURS Natural (clear); White	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	<i>EVOH <= 6.0%wt + PE-g-MAH tie layers with MAH > 0.1%wt and EVOH:tie layers ratio <= 2; ,Enkase (fluorination); In-mould fluorination; SiOx Plasma Coating</i>	<i>EVOH > 6.0%wt + PE-g-MAH tie layers with MAH > 0.1%wt and EVOH:tie layers ratio <= 2; EVOH <= 1% with any other tie layers</i>	EVOH > 1% with any other tie layers; PA; PVDC; <i>Plasma Fluorination</i> ; Aluminium; Metallisation; PVOH
ADDITIVES	Additives that are unavoidable in processing (stabilizers, antioxidants, lubricants, nucleating agents, peroxides) and density remains < 0,97 g/cm³	Mineral fillers (CaCO3, talc) not increasing density more than 0,97 g/cm³	Additives changing the material density > 1 g/cm³; Flame-retardant additives; plasticizers; Bio-/oxo-/photodegradable additives
LAMINATING ADHESIVES	Laminating adhesives <i>approved</i> as fully compatible by RecyClass; To be tested if in combination with a barrier material	Aliphatic polyurethanes < 2.5%; Laminating adhesives <i>approved</i> as limited compatible by RecyClass; To be tested if in combination with a barrier material	Aliphatic polyurethanes > 2.5 %; Aromatic polyurethanes & Water-based acrylics; Laminating adhesive specially developed for high thermal applications above boiling and/or for high chemical resistance (to be tested); Any other laminating adhesives (Epoxy, etc.)
ATTACHMENTS	COLOURS Natural (clear); White	Light colours	Black Inner layer, Black, Carbon Black, Other dark colours
CLOSURE SYSTEM	<i>HDPE; LDPE; LLDPE; MDPE</i>	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; TPO; TPS <= 1%	PP; TPS; PET, PETG, PLA, PS (all with a density > 1 g/cm³); Removable silicon with a density > 1 g/cm³; <i>PO foamed <= 1%</i>	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 < 1 g/cm³
DECORATION***	INKS Non-bleeding inks compliant with <i>EuPIA Exclusion Policy</i>		Inks that bleed; Inks non-compliant with <i>EuPIA Exclusion Policy</i> ; PVC binders
LABELS MATERIALS** (PSL, WET-GLUE LABELS, WRAP-AROUND LABELS, IML)	Removable labels in PE (all with density < 1 g/cm³)	Removable labels in PP, PO (with density < 1 g/cm³); Removable labels in PET, PETG, PLA, PS (all with density > 1 g/cm³); Removable labels in Paper without fiberloss; Removable PO-foamed labels	Non removable or partially removable labels; Labels that hinder the recognition of the PE; Labels in non PO-materials with density < 1 g/cm³; Paper labels with fiberloss 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); <i>Self-separable plastic and cardboard sleeves under mechanical pressure (sorting test mandatory)</i>	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 (<i>sorting test</i> mandatory)	Sleeves that hinder the recognition of the PE; Sleeves in non PO-materials with density < 1 g/cm³; Cardboard sleeves with fiberloss 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.

* Polymer resin can be either fossil- or bio-based, virgin or recycled. If different grades of the same polymer are present, weights should be cumulated.

**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.

*** Decorative technologies must not hinder the recognition of the underlying 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 surfaces on containers > 500 ml: < 70% coverage*

- *Size of non-PE surfaces on containers < 500 ml: < 50% coverage*

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