Natural PE Flexible Films for Household and Commercial Packaging

	YES - FULL COMPATIBILITY	CONDITIONAL - LIMITED COMPATIBILITY	NO - LOW COMPATIBILITY
MATERIAL COMPOSITION (TOTAL AMOUNT OF PE & AMOUNT OF PP ATTACHMENTS 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
MATERIAL*	Oriented and non-oriented LDPE, LLDPE (including PE-plastomers), HDPE; EVA, EBA, EEA, EMA copolymers with acrylate monomers representing <= 5 wt% of the film; EMAA, EAA copolymers & ionomers <= 20%	Multilayer PE/PP with PP <= 5%	Multilayer PE/PP with PP > 5%; Any other polymer (e.g. PET, PVC, etc.)
COLOURS	Unpigmented; transparent	Light colours; translucent colours	Dark colours; black; carbon black
SIZE	> A4 or > 50 x 50 mm once compacted	< A4 format or between 20 x 20 and 50 x 50 mm once compacted (Sorting test)	< 20 x 20 mm
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***	SiOx and AlOx without additional coatings;	<= 5% EVOH (in polyolefinic combination film); <=15% PA 6/66 copolymer with melting temperature < 192 °C and incorporating >= 10% PE-g-MAH tie layers	> 5% EVOH (in polyolefinic combination film); Any other PA; Metallisation; PVOH; PVC, PVDC barrier layer, <u>AIOA coating with PVOH primer</u> , any other barrier layer; aluminium
ADDITIVES	Additives that do not increase the density higher than 0,97 g/cm³		Bio-/oxo-/photodegradable additives; foaming agents used as expanding chemical agents; Additives that do increase the density higher than 0,97 g/cm³ (CaCO3, talc, glass fibers, etc.)
LAMINATING ADHESIVES	Laminating adhesives approved as fully compatible by RecyClass; To be tested if in combination with a barrier material	Aliphatic polyurethanes <= 2.5%; Laminating adhesives approved 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.)
CLOSURE SYSTEM	LDPE, LLDPE (including PE-plastomers), HDPE	PP	Metal, aluminium, PVC, PET, PETG, PS, PLA, non PO or foams with density < 1 g/cm³
LINERS, SEALS AND VALVES	LDPE, LLDPE (including PE-plastomers), HDPE	PP, removable aluminium liddings	$\label{eq:metal_policy} Metal, aluminium, PVC, PET, PETG, PS, PLA, foiled paper, non PO or foams with density < 1~g/cm^3$
OTHER COMPONENTS	LDPE, LLDPE (including PE-plastomers), HDPE	PP	Metal, aluminium, PVC, PET, PETG, PS, PLA, paper, foams with density < 1 g/cm ³
INKS	PU-based inks; Non-bleeding inks compliant with <u>EuPIA Exclusion Policy</u>		NC-based inks; Inks that bleed; Inks non-compliant with EuPIA Exclusion Policy
LABELS	PE	PP	Metallized labels, any other; paper labels
ADHESIVES FOR LABELS	Water soluble or water-releasable at less than 40°C		Adhesives non-soluble in water or non-releasable in water at less than 40°C
DIRECT PRINTING	Laser marked print; Printed production or expiry date	Printing covering < 50%**	Printing covering > 50% **

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.

Last update: January 2024

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

^{**} Temporary solution

^{***} Guidelines are non-company specific. Barrier structures compatible with recycling are listed in RecyClass Approval page.