## **Coloured PE Flexible Films for Household and Commercial Packaging**

		FULL COMPATIBILITY	LIMITED COMPATIBILITY	NON-COMPATIBILITY
	MATERIAL COMPOSITION (TOTAL AMOUNT OF PE & AMOUNT OF PP ATTACHMENTS IN THE PACKAGING)	A >= 95%, B >= 80% and all packaging features are FULLY compatible with recycling	C >= 70% and all packaging features are FULLY compatible with recycling	Non-recyclable < 70% 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 non-recyclable	Non-recyclable
MAIN BODY	MATERIAL	Oriented and non-oriented LDPE, LLDPE (including PE-plastomers), HDPE; <u>EVA</u> , EBA, EEA, EMA copolymers with vinyl acetate and acrylate monomers representing < 5 % of the film; EMAA, EAA copolymers & ionomers <= 20 %; C3C2-plastomers <=15 %	Multilayer PE/PP <u>with PP &lt;= 5 %</u>	Multilayer PE/PP with PP > 5 %; Any other polymer (e.g. PET, PVC, etc.)
	COLOURS	Light colours; translucent colours	NIR-detectable dark colours (Sorting test)	Non NIR-detectable dark colours
	SIZE	Packaging surface > 100 cm <sup>2</sup>	Packaging surface between 30 and 100 cm <sup>2</sup> (sorting test)	Packaging surface < 30 cm <sup>2</sup>
	PRODUCT RESIDUES (EASY TO EMPTY INDEX)	A if the index is < 5 %; B if the index is < 10 %	C if the index is < 15 %	Index is >= 15 %
	BARRIER***	SiOx and AIOx without additional coatings; EVOH <= 5 % + PE-g-MAH tie layers with MAH > 0.1wt% and EVOH:tie layer ratio <= 1	EVOH <= 5 % + PE-g-MAH tie layers with MAH > 0.1wt% and EVOH:tie layer ratio > 1; Metallisation; PVOH <= 1 % & soluble EVOH <= 2 % with melt temperature <225°C; <=15 % PA 6/66 copolymer with melting temperature < 192 °C and incorporating >= 10% PE-g-MAH tie layers.	EVOH > 5 %; Any other PA; PVOH > 1 %; PVC, PVDC barrier layers; any other barrier layer; aluminium
	ADDITIVES	Additives that do not increase the density higher than 0,97 g/cm <sup>3</sup>		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	Polyurethanes and water-based acrylics <= 3 %; Laminating adhesives approved as fully compatible by RecyClass; To be tested if in combination with other barrier material than EVOH and metallisation	Polyurethanes and water-based acrylics 3-5 %; Laminating adhesives approved as limited compatible by RecyClass; To be tested if in combination with other barrier material than EVOH and metallisation	Polyurethanes and water-based acrylics >5 %; 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	CLOSURE SYSTEM	LDPE, LLDPE (including PE-plastomers), HDPE	PP	Metal, aluminium, PVC, PET, PETG, PS, PLA, non PO or foams with density < 1 g/cm <sup>3</sup>
	LINERS, SEALS AND VALVES	LDPE, LLDPE (including PE-plastomers), HDPE	PP, removable aluminium lidding	Metal, aluminium, PVC, PET, PETG, PS, PLA, foiled paper, non PO or foams with density < 1 g/cm <sup>3</sup>
	OTHER COMPONENTS	LDPE, LLDPE (including PE-plastomers), HDPE	PP	Metal, aluminium, PVC, PET, PETG, PS, PLA, paper, foams with density < 1 g/cm <sup>3</sup>
DECORATION	FACESTOCK LABEL MATERIAL	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
	INKS	PU-based inks (with no NC); Inks & Varnish < 5 %; Retentive inks compliant with <u>EuPIA Exclusion Policy;</u>	<= 0.8% of NC-binders**** Inks & Varnish 5 - 7 %	<ul> <li>&gt; 0.8% of NC-binders;</li> <li>Inks &amp; varnish &gt; 7 %;</li> <li>Bleeding inks; Inks non-compliant with EuPIA Exclusion Policy;</li> <li>PVC co- and terpolymer binders; Any other chlorinated binders</li> </ul>
	OTHER DECORATIVE TECHNOLOGIES	Laser marking with coverage < 50 %**	Laser marking with coverage > 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. \* Polymer resin can be either fossil- or bio-based, virgin or recycled.

\*\* Temporary solution.

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 "Guidelines are non-company specific. Barrier structures compatible with recycling are listed in <u>RecyClass Approval</u> page.
 ""NC-binders will be reconsidered based on future findings from RecyClass and SafeCycle project
 """ Approved technologies can be found <u>here</u>

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