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Test de la Recyclabilité des Emballages

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## Recyclability tables

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# Recyclability tables

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## Operation of the tables

To carry out the recyclability analysis and determine the compatibility of each packaging component with the targeted recycling stream, the TREE tool uses the tables presented in this document. These tables are validated and regularly updated by the materials committees (Cotrep, CEREC, Alutrec, etc.). For each recycling stream, they allow the components of the packaging to be categorised according to their compatibility with the recycling stream in question.

Although we strive to keep the tool up to date, there may be a time lag between the latest validated versions of the tables and their transposition into the tool due to the development time required for TREE.

Therefore, you will find below:

- The keys for understanding the recyclability tables
- The tables used in the tool

## *Keys for recyclability tables*

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- **Green Category:** This includes materials, additives, colorants, adhesives, inks, etc. that do not currently cause problems during regeneration and recycling stages.
- **Orange Category:** This includes materials, additives, colorants, adhesives, inks, etc. that do not prevent recycling of packaging items, but seriously affect regeneration and recycling (impact on recycled material quality, recycling yield, etc.).
- **Red Category:** This includes materials, additives, colorants, adhesives, inks, etc. that compromise the overall recyclability of packaging items. If any of these elements are included in the composition of a packaging item, it is currently considered non-recyclable in France.

## 6.1 Recyclability Table – Glass packaging

	Green category		Orange category	Red category
	Full compatibility - Ideal	Tolerated compatibility	Limited compatibility - Conditional	Non compatible and/or disruptive
<b>Materials</b>	- Soda-lime glass			- Boro silicate glass - Cristal
<b>Colour / In-blend treatment</b>			- Presence of heavy metals - Non-translucent in-blend treatment	
<b>Shaping / Varnish</b>	- Frosting - Surface treatment - Translucent coating		- Non-translucent coating	
<b>Closure system</b>	- Magnetic steel - Aluminium	- Cork - Wood - Plastic (except PVC)	- PVC/PVdC	- Non-magnetic metals and non reactive to eddy current (tin, brass, stainless steel...) - Porcelain - Ceramic - Cristal - Boro silicate glass - Other infusible materials
<b>Label</b>		- Paper or plastic (except PVC/PVdC) if attached with a <b>non ultra-adhesive glue</b>	- PVC/PVdC	- Paper or plastic (except PVC/PVdC) if attached with an ultra-adhesive glue
<b>Adhesive</b>				- Ultra-adhesive glue for labels (e.g. certain pressure-sensitive adhesives)
<b>Others</b>				

## 6.2 Recyclability Table – Paper/cardboard packaging

	GREEN		ORANGE	RED
	Recyclable ; ideal	Recyclable, tolerate	Recyclable, to avoid	Non recyclable/disruptive
<b>Material</b>	Cellulosic fibers (any sources : wood, bamboo, sugar cane residue, other annual plants sources...) • Paper, paper board • Corrugated board • Moulded cellulose • Transparent/translucent Paper			- Reinforced paper&board ( <i>whatever nature of reinforcement : metallic, plastic, textile etc.</i> ) - Non defibrated vegetable material : wood, bamboo, palm tree leaf, etc.
<b>Color</b>	- unbleached pulp, bleached pulp, mass tinted pulp			
<b>Filler / Mass treatment</b>	- mineral fillers	- Non defibrated vegetables debris (grass debris, cocoa shell debris...) incorporated into the pulp - parchment paper	- Wet Strength (intensity still to be define)	- Wet strenght treatment - insufficient pulping after 45 minutes
<b>Coatings / Barriers</b> (Material/substances covering the entire surface of the paper&board material)	PVOH / bio-source "PVOH" Mineral coating Polymeric coating	If %weight of other material <15% --> Non complex paper&board If %weight of other material >15% --> Complex paper&board • Extruded PE • Extruded PP • Extruded PET • Extruded PLA, • Complex PE/alu • Aluminium film • Other extruded plastic (excl. PVC / PVdC) • Cellophane • Viscose	PVC / PVdC	
<b>Shaping</b>	- Staples - Paper tape	- Plastic tape	- Reinforced paper tape (whatever nature of reinforcement)	
<b>Closing system / windows and other accessories</b> (Associated material / object not covering the entire surface of the paper&board material)	- Paper tape - Paper&board cover (dry moulding, moulded fiber...) - Translucent paper window	- Plastic tape, glue/adhesives - plastic windows - Plastic object (cover...) excl. PVC - Other materials (metal, wood)	- PVC / PVdC	
<b>Labels</b>	- paper label	- Plastic label (excl. PVC/PVdC) - WS paper label	- PVC / PVdC	
<b>Inks and printing</b>		- intense and bleeding colors	- Inks with more than 1% of MOSH & MOAH	
<b>Adhesives and glues</b>	- Screenable adhesives (ERPC Score >70 to INGEDE12 test) (ex: non PSA hotmelt)	- Water based adhesives	- Partially dispersable and/or non screenable adhesives (ex: PSA)	
<b>Other elements</b>		- wineskin (Bag-In-Box) - RFID chip		

### To be noted, particularly for paper/cardboard packaging

For a packaging with a rate of theoretically recoverable material near 50%, we recommend you make another test according to the CEREC methodology, in order to check if the reject rate is less than 50%, another condition to claim that a paper-board packaging is recyclable.

### 6.3 Recyclability Table – Rigid aluminium packaging

Alutrec	Recyclable, ideal	Recyclable, tolerated	Recyclable, but better avoiding	Non recyclable/Disturbing the process
Packaging	Aluminium	Aluminium/plastic (PVC <8%) Aluminium/organic matter Aluminium/Steel (chromium steel, tinned steel, tin plate, black plate) Zamak		PVC >8%, PVDC
Direct Printing	External and internal surface coating			PVDC
Closing systems	Aluminium	Plastic (PVC<8%), organic matter Steel (chromium steel, tinned steel, tin plate, black plate) Zamak Tin		PVC >8%, PVDC
Valve, pump...	Aluminium	Plastic, organic matter Steel (chromium steel, tinned steel, tin plate, black plate) Zamak		PVC, PVDC
Tag		Paper, plastic (sleeve)		PVC, PVDC
Others				

### 6.4 Recyclability Table – Flexible aluminium packaging

Alutrec	Recyclable, ideal	Recyclable, tolerated	Recyclable, but better avoiding	Non recyclable/Disturbing the process
Packaging	Aluminium	Aluminium/plastic Aluminium/organic matter		PVC *, PVDC
Color/printing		Coating, lacquer		PVC, PVDC
Barrier		Coating, lacquer Plastic liner		PVC, PVDC
Tag		Paper, Plastic		PVC, PVDC
Others				

### 6.5 Recyclability Table – Steel packaging

COTREM	Recyclable, ideal	Recyclable, tolerated	Recyclable, but better avoiding	Non recyclable/Disturbing the process
Packaging	Steel (Tin plate or Chrome steel)	Steel/Plastic (PVC <8%) Steel/Organic matter Aluminium	>15% of plastic/organic matter in packaging	>20% of plastic/organic matter in packaging Stainless steel (magnetic and non magnetic) * PVC >8%
Direct Printing	External and internal surface coating			
Closing systems	Steel (Tin plate or Chrome steel)	Plastic (PVC <8%) Aluminium	>15% de plastique/matière organique en poids/poids emballage total	>20% of plastic/organic matter in packaging PVC >8%
Valve, pump...	Steel (Tin plate or Chrome steel)	Plastic (PVC <8%)		PVC >8%
Tag		Paper, plastic (sleeve)		RFID PVC, PVDC
Others				

## 6.6 Recyclability Table – Plastic packaging

The latest updated versions of the recyclability tables for plastic packaging are available on the COTREP website at: <https://www.cotrep.fr/etapes/>

The tables below were used to develop the tool, they are shown here in French, but you can find them in English on the COTREP website.

### 6.6.1 Recyclability Table – Clear PET bottle and dispenser bottle packaging items

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditionnal	Not Compatible and/or disruptive
BODY	Material	PET			Copolyester (ex. PETG <sup>(EPBP)</sup> , PET-GAG, PET hot-fill <sup>(AG62)</sup> ) PET in association with other plastic resins (PET/PE <sup>(AG59)</sup> , PET/PLA, PET/PVC, etc.) PVC <sup>EPBP</sup> PLA <sup>(AG35)</sup> PET in association with a none plastic material (wood <sup>(AG56)</sup> , ceramic <sup>(AG46)</sup> ...)
	Colour (in blend)	Transparent clear Transparent light blue			Other transparent colours Opaque <sup>(AG19)</sup> Fluorescence or metallic
	Barrier		PA 3 layer structure max 5% <sup>(EPBP, AG37)</sup> Coating SiOx or Cox <sup>(EPBP)</sup> PGA <sup>(EPBP)</sup> , PTN <sup>(EPBP)</sup>	Oxygen scavenger <sup>(VLP0801, VLP0604)</sup>	EVOH PA 5 layer structure <sup>(EPBP, AG37)</sup> PET/PA in blend Other barriers and resins (multilayer, blends, hydrosoluble barrier)
	Additive and density		UV stabilisers AA blockers Optical brightener		PET d < 1 PET with additive loads or expanded Fluorescents Bio-/oxo-/photodegradables additives, nanocomposites <sup>EPBP</sup>
Closure System	Cap, valve, pump	not printed transparent PET PE or PP	other plastic d<1 <sup>(FT25)</sup> EVOH <sup>(EE0404)</sup> or EVA <sup>(EE04011)</sup> associated and not separable from PP or PE d<1	Silicone or TPE d<1 <sup>(FT25, VLP0701)</sup>	Transparent printed PET Other plastics, silicone or TPE d>1 <sup>(FT25)</sup> Metal <sup>(AG39)</sup> Wood <sup>(AG56)</sup> Thermosed plastics Glass (ex. sphere) <sup>(AG39)</sup>
	Seal		Mono or multi d<1, metal free ; peel-off seal and/or with a water releasable adhesive (ex. plastic, plastic/paper) Seal in Ketchup packaging or other condiments <sup>(VLP0603)</sup>		Mono or multi seal with d<1, <b>not</b> peelable and with a <b>not</b> water releasable adhesive Mono or multi seal d<1 <b>with</b> metallic elements (ex. plastic with alu, métallization) Mono ou multi seal d>1 PET seal Aluminium seal (peelable or not, water releasable or not adhesive)

DESIGN	Direct printing on the pack	Without printing ☒ Laser marked	☒ Production or expiry date mark		☒ Any other direct printing
	Label on the pack body or the cap	Plastic d < 1 (ex. PP <sup>(AG15)</sup> , OPP, PE)	Paper <sup>EPBP</sup>		Other plastics d > 1 (ex. PVC, PETg, PS, PET on clear PET) <sup>(AG08, AG07)</sup> Multilayer with an alu layer (ex. paper/alu, PP/alu) <sup>(AG13)</sup>
	Sleeve	PO (PP/PE blend mostly in PP) PE	Other plastics d < 1		Other plastics d > 1 (ex. PET, PETG <sup>(AG44)</sup> , PS <sup>(AG42)</sup> , PLA et PVC <sup>(AG08)</sup> )
	Adhesive (Label and bonded lid)	Water releasable at 60-80°C in alkaline conditions and residue-free <sup>EPBP</sup>			Not water releasable at 60-80°C in alkaline conditions <sup>EPBP</sup>
	Ink (on label, seal, cap, sleeve)	Without printing Not washable in water at 60-80°C in alkaline conditions <sup>EPBP</sup> (eg. Ink between 2 material layers or on the surface below a varnish layer) Good practices EuPIA			Washable (ex. surface printing) Metallic inks
Other elements	Other elements Associated PE or PP elements			RFID Welded or bonded elements with a not water releasable adhesive PVC Aluminium element PETG, PS, PLA elements Thermosed plastics	

## 6.6.2 Recyclability Table – Coloured PET bottle and dispenser bottle packaging items

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditional	Not Compatible and/or disruptive
BODY	Material	PET			Copolyester (ex. PETG <sup>*(EPBP)</sup> , PET-GAG, PET hot-fill <sup>*(AG62)</sup> )  PET in association with other plastic resins (PET/PE, PET/PLA, PET/PVC, etc.)  PVC <sup>-EPBP</sup>  PLA <sup>*(AG35)</sup>  PET in association with a none plastic material (wood <sup>(AG56)</sup> , ceramic <sup>(AG46)</sup> ...)
	Colour (in blend)	Blue  Transparent Green	All colour except blue and transparent green <sup>*(AG33)</sup>	All colours with mineral content > 1% <sup>*(AG19)</sup>	Not detectable black color in external layer <sup>(EE0907c)</sup>  Fluorescence or métallique
	Barrier		PA 3 layer structure max 5% <sup>*(EPBP, AG37)</sup>  Coating SiOx or Cox <sup>*(EPBP)</sup>  PGA <sup>*(EPBP)</sup> , PTN <sup>*(EPBP)</sup>  Oxygen scavenger <sup>*(VLP0801, VLP0604)</sup>		EVOH  PA 5 layer structure <sup>*(EPBP, AG37)</sup>  Blend PET/PA  Other barriers and resins (multilayer, blends, hydrosoluble barrier)
	Additive and density		UV stabilisers  AA blockers  Optical brightener  Expanded PET d > 1 (gaz, blowing agent)		Expanded PET d < 1 (gaz, expansion agent)  PET with additive loads or expanded  Fluorescents  Bio-/oxo-/photodegradables additives, nanocomposites <sup>EPBP</sup>
Closure System	Cap, valve, pump	Transparent or blue or green PET, not printed (except for expiry date mark)  PE or PP	PET, all color except blue or transparent green  Printed PET  Other plastics d<1 <sup>(FT25)</sup>  EVOH <sup>(EE0404)</sup> or EVA <sup>(EE04011)</sup> associated and not separable from PP or PE d<1	PET with mineral > 1%  Silicone or TPE d<1 <sup>(FT25, VLP0701)</sup>	Other plastic, silicone or TPE d>1 <sup>(FT25)</sup>  Metal <sup>(AG39)</sup>  Wood  Thermoset plastics  Glass (ex. sphere) <sup>(AG39)</sup>
	Seal		Mono or multi seal with d<1, metal free ; peel-off seal and/or with a water releasable adhesive (ex. plastic, plastic/paper)  Seal in Ketchup packaging or other condiments <sup>*(VLP0603)</sup>		Mono or multi seal d<1, not peelable and with a not water releasable adhesive  Mono or multi seal d<1 with metallic elements (ex. plastic with alu, métallization)  Mono ou multi seal d>1  PET seal  Aluminium seal (peelable or not, water releasable or not adhesive)



DESIGN	Direct printing on the pack	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at 60-80°C, on PET packaging other than transparent green and opaque white		Direct printing - washable ink at 60-80°C  Direct printing on PET packaging other than transparent green and opaque white  Metallized ink
	Label on pack or cap	Plastique d <1 (ex. PP, OPP, PE)	Papier <sup>EPBP</sup>	PET on a PET pack which is not green or white	Other plastics d>1 (ex. PVC <sup>(AG08)</sup> , PETg, PS, PET on green and white PET pack) <sup>(AG07)</sup>  Multilayer with an aluminium layer (eg. paper/alu, PP/alu) <sup>(AG13)</sup>  PVC Ruffle
	Sleeve	PO (PP/PE blend mostly in PP) PE	Other plastics d<1	PET on a PET pack which is not transparent green or white	Other plastics d>1 (ex. PET on transparent green and white PET pack, PETG <sup>(AG44)</sup> , PS <sup>(AG42)</sup> , PLA et PVC <sup>(AG08)</sup> ) <sup>(AG12)</sup>
	Adhesive (Label and bonded lid)	Water releasable at 60-80°C in alkaline conditions and residue-free <sup>EPBP</sup>			Not water releasable at 60-80°C in alkaline conditions <sup>EPBP</sup>
	Ink (on label, seal, cap, sleeve)	Without printing Not washable in water at 60-80°C in alkaline conditions <sup>EPBP</sup> (ex. Ink between 2 material layers or on the surface below a varnish layer) Good practices EuPIA			Washable (ex. surface printing)  Metallic inks
Other elements	Other elements Associated PE or PP elements			RFID  Welded or bonded elements with a not water releasable adhesive  PVC  Aluminium element  PETG, PS, PLA elements  Thermosed plastics	

### 6.6.3 Recyclability Table – PP bottle and dispenser bottle packaging items

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditionnal	Not Compatible and/or disruptive
BODY	Material	PP		PP associated with PE	Multilayers PP (PP/PLA, PP/PVC, PP/PS, PP/PET, PP/PETG, etc.) PP associated with a none plastic material (wood <sup>(AG57)</sup> , ceramic ...)
	Colour (in blend)	Colourless and all colours			Not detectable black colorant in external layer
	Barrier		EVOH with tielayer* <sup>(AG53)</sup> Kapseal <sup>®</sup> <sup>(AT1601)</sup> Carbon black as an internal layer Oxygen scavenger		Other barriers and resins (multilayers, blends) Aluminium <sup>(AG11)</sup>
	Additive and density		Expanded PP d<1 (gaz, blowing agent)		PP with additive loads that result in d>1 <sup>(AG50)</sup> PP with additive loads and expanded
SURE SYST	Cap, valve, pump	PP	PE Plastic d>1	Metal <sup>(AG11)</sup> Silicone or TPE d>1	Wood Other plastic, silicone or TPE d<1 Thermoset plastics Glass (ex. sphere)
	Seal		Seal d<1 in PE, PP, EVOH with tielayer, surlyn, coating ; peelable and/or with a water releasable adhesive Mono or multi seal d>1 , peelable and/or with a water releasable adhesive (ex. plastic, plastic/paper, plastic/alu)	Seal d<1 in PE, PP, EVOH with tielayer, surlyn, coating ; <b>not peelable and with a not water releasable adhesive</b> Peelable Aluminium Seal and/or with a water releasable adhesive <sup>(AG11)</sup>	Mono or multi seal d<1 Mono ou multi seal d>1 <b>not peelable and with a not water releasable adhesive</b> <b>Not peelable aluminium seal and with a not water releasable adhesive</b> <sup>(AG11)</sup>
DESIGN	Direct printing on the pack	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at room temperature EuPIA Good pratics		Direct printing - washable ink at room temperature Metallic ink
	Label on pack or cap	PP, OPP with a water releasable adhesive (without covering conditions) <sup>(AG16)</sup> PE with a water releasable adhesive	Paper with a water releasable adhesive Paper wrapping with a line of not water releasable adhesive PP, OPP with a not water releasable adhesive Plastic d>1 with a water releasable adhesive (ex. PET, PETG, PS) PP based IML	PSL Paper with a not water releasable adhesive PE with a not water releasable adhesive PE based IML	PVC <sup>(AG14)</sup> Other plastics d<1 Other plastics d>1 with a not water releasable adhesive Multilayers with an alu layer (ex. PP/alu) <sup>(AG11)</sup> IML with a different plastic resin than the pack body
	Sleeve	PP, OPP without covering conditions PE <sup>(AG18, CSEMP0405)</sup>	PS, PETG, PET		PVC, PLA
	Glue/Adhesive (Label and bonded lid)	Water releasable at room temperature and without residue on pack			Not water releasable at room temperature
	Ink (on label, seal, cap, sleeve)	Without printing Not washable at room temperature (ex. Ink between 2 material layers or on the surface below a varnish layer) Good pratics EuPIA			Washable at room temperature (ex. surface printing) Metallic inks
Other elements	PP element not bonded or with a water releasable adhesive	PET, PETG, PS elements not bonded or with a water releasable adhesive	Aluminium element not bonded or with a water releasable adhesive	RFID bonded element with a not water releasable adhesive PVC, PLA Thermoset plastics	

## 6.6.4 Recyclability Table – HDPE bottle and dispenser bottle packaging items

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditional	Not Compatible and/or disruptive
BODY	Material	HDPE	Other PE <sup>(AG60)</sup> Surlin <sup>*(AT-PEHD-14-01)</sup>	PE associated with PP	Multilayers PEHD (PEHD/PLA, PEHD/PVC, PEHD/PS, PEHD/PET, PEHD/PETG, etc.) Thermoset plastics PE associated to a non plastic material (wood <sup>(AG57)</sup> , ceramic ...)
	Colour (in blend)	Colourless and all colors			Not detectable black colorant in external layer
	Barrier		EVOH with tielayer <sup>(AG52)</sup> Carbone black as an internal layer Oxygen scavenger		Other barriers and resins (multilayers, blends) Aluminium
	Additive and density		Expanded PE d<1 (gaz, blowing agent)		PE with additive loads that result in d>1 <sup>(AG49)</sup> PE with additive loads and expanded
DISURE SYSTEM	Cap, valve, pump	PE	PP Plastic d>1	Metal <sup>(AG02, AG40)</sup> Silicone or TPE d>1	Other plastic, silicone or TPE d<1 Wood Thermoset plastics Glass (ex. sphere) <sup>(AG40)</sup>
	Seal		Seal d<1 in PE, PP, EVOH with tielayer, surlin <sup>*(AT-PEHD-14-01)</sup> , coating ; peelable and/or with water releasable adhesive Mono or multi seal d>1, peelable and/or with a water releasable adhesive (ex. plastic, plastic/paper, plastic/alu)	Seal d<1 in PE, PP, EVOH with tielayer, surlin <sup>*(AT-PEHD-14-01)</sup> , coating ; not peelable and with a not water releasable adhesive Peelable Aluminium Seal and/or with water releasable adhesive	Mono or multi seal d<1 Mono or multi seal d>1 not peelable and with a not water releasable adhesive Not peelable aluminium seal and with a not water releasable adhesive
Design	Direct printing on the pack	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at room temperature EuPIA good pratics		Direct printing - washable ink at room temperature Metallic ink
	Label on pack or cap	PE with a water releasable adhesive (without covering conditions) PP, OPP with a water releasable adhesive <sup>(AG16)</sup>	Paper with a water releasable adhesive Paper wrapping with a line of not water releasable adhesive PE with a not water releasable adhesive Plastic d>1 with a water releasable adhesive (ex. PET, PETG, PS <sup>(AG43)</sup> ) PE based IML	PSL Paper with a not water releasable adhesive PP, OPP with not water releasable adhesive PP based IML	PVC <sup>(AG14)</sup> Other plastics d<1 Other plastics d>1 with a not water releasable adhesive Multilayers with an alu layer (ex. PP/alu) <sup>(AG45)</sup> IML with a different plastic resine than the pack body
	Sleeve	PE without covering conditions	PO (PP/PE blend mostly in PP) PS <sup>(AG43)</sup> , PETG, PET		PVC <sup>(AG14, AG12)</sup> , PLA
	Adhesive (Label and bonded lid)	Water releasable at room temperature and without residue on pack			Not water releasable at room temperature
	Ink (on label, seal, cap, sleeve)	Without printing Not washable at room temperature (ex. Ink between 2 material layers or on the surface below a varnish layer) EuPIA good pratics			Washable at room temperature (ex. surface printing) Metallic inks
Other elements	PE element not bonded or with a water releasable adhesive	PET, PETG, PS elements not bonded or with a water releasable adhesive	Aluminium element not bonded or with a water releasable adhesive	RFID bonded element with a not water releasable adhesive PVC, PLA Thermoset plastics	

### 6.6.5 Recyclability Table – Packaging items excluding clear PET bottles and dispenser bottles

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditionnal	Not Compatible and/or disruptive
BODY	Material	PET* (AG51)			Copolyester (ex. PETG* (EPBP), PET-GAG, PET hot-fill* (AG62)) PET in association with other plastic resins (PET/PE* (AG59), PET/PLA, PET/PVC, etc.) PVC (EPBP) PLA* (AG35) PET in association with a none plastic material (wood (AG46), ceramic (AG46) ...)
	Colour (in blend)	Transparent clear Transparent light blue			Other transparent colours Opaque* (AG19) Fluorescence or metallic
	Barrier				EVOH PA* (EPBP, AG37) Other barriers and resins (multilayer, blends, hydrosoluble barrier)
	Additive and density		UV stabilisers AA blockers Optical brightener Silicone on surface for unstacking		PET d<1 PET with additive loads or expanded Fluorescents Bio-/oxo-/photodegradables additives, nanocomposites (EPBP)
closure system	Cap not sealed/bonded	Not printed transparent PET PE or PP	Other plastic d<1		other plastic d>1 Metal Wood Thermosed plastics Printed transparent PET
	Cap sealed/bonded		Not printed transparent PET; peelable and/or with water releasable adhesive PE or PP or other plastic d<1; peelable and/or with water releasable adhesive		Other plastic d>1 Metal Wood Thermosed plastics
	Heat-sealed Lid		Mono or multi lid d<1, without metal; peelable (ex. plastic, plastic/paper) Not printed transparent PET lid, peelable		Mono or multi lid d<1, <b>not peelable</b> Mono or multi lid d<1 <b>with metal</b> (ex. plastic/alu, metallization) Mono or multi d>1 (except not printed transparent PET, peelable) Aluminium lid (peelable or not),
	Bonded lid		Mono or multi d<1, without metal; peelable and/or with a water releasable adhesive (ex. plastic, plastic/paper) Not printed transparent PET lid, peelable and/or with a water releasable adhesive		Mono or multi lid d<1, <b>not peelable</b> and with a <b>not</b> water releasable adhesive Mono or multi lid d<1, with metal (ex. plastic/alu, metallization) Mono or multi lid d>1 (except not printed transparent PET, peelable and/or with a water releasable adhesive) Aluminium lid (peelable or no, water releasable or not adhesive)
	Skin				PVC
	Flowpack				
	Stretchable film		Mono or multi film d<1, without metal		Mono or multi film d<1, with metal Mono or multi film d>1

DECORS	Direct printing on pack	Without printing ☒ Laser marked	Production or expiry date mark		All other direct printing
	Label on pack or cap	Plastic d <1 (ex. PP <sup>(AG15)</sup> , OPP, PE)	Paper <sup>EPBP</sup>		Other plastic d>1 (ex. PVC, PETg, PS, PET on clear PET pack) <sup>(AG08, AG07)</sup> Multilayer with an alu layer (ex. paper/alu, PP/alu) <sup>(AG13)</sup>
	Label on Mono or multi lid d<1, without metal	Plastic d <1 (ex. PP, OPP, PE) with a water releasable or not adhesive	Paper with a water releasable adhesive		Paper with not water releasable adhesive Other plastic d>1 (ex. PVC, PETg, PS, PET) Multilayer with an alu layer (ex. paper/alu, PP/alu) <sup>(AG13)</sup>
	Sleeve	PP <sup>(AG15)</sup> , OPP <sup>(AG15)</sup> , PE <sup>(AG17, CSEMP0405)</sup> d <1	Other plastics d<1		Other plastics d>1 (ex. PET, PETG <sup>(AG44)</sup> , PS <sup>(AG42)</sup> , PLA et PVC <sup>(AG08)</sup> )
	Adhesive (Label and bonded lid)	Water releasable at 60-80°C in alkaline conditions and residue-free <sup>EPBP</sup>			Not water releasable at 60-80°C in alkaline conditions <sup>EPBP</sup>
	Ink (on label, seal, cap, sleeve)	Without printing Not washable in water at 60-80°C in alkaline conditions <sup>EPBP</sup> (eg. Ink between 2 material layers or on the surface below a varnish layer) Good practices EuPIA			Washable (ex. surface printing) Metallic inks
Other elements	Other elements	Element d<1 not bonded or with a water releasable adhesive		RFID Welded or bonded elements with a not water releasable adhesive PVC Aluminium element PETG, PS, PLA elements Thermosed plastics	

6.6.6  
bottles

Recyclability Table – Packaging items excluding coloured PET bottles and dispenser

COTREP

		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditionnal	Not Compatible and/or disruptive
BODY	Material	PET		CPET	Copolyester (ex. PETG <sup>(EPBP)</sup> , PET-GAG, PET hot-fill <sup>(AG31)</sup> ) PET in association with other plastic resins (PET/PE, PET/PLA, PET/PVC, etc.)  PET in association with a none plastic material (wood <sup>(AG56)</sup> , ceramis <sup>(AG46)</sup> ...)
	Colour (in blend)	Blue Green	All colour except blue and green* <sup>(AG33)</sup>	All colours with mineral content > 1%* <sup>(AG19)</sup>	Not detectable black colour in external layer <sup>(EE0907c)</sup> Fluorescence or metallic
	Barrier				EVOH PA <sup>(EPBP, AG37)</sup>  Other barriers and resins (multilayer, blends, hydrosoluble barrier)
	Additive and density		UV stabilisers AA blockers Optical brightener Expanded PET d > 1 (gaz, blowing agent)		Expanded PET d < 1 (gaz, blowing agent) PET with additive loads or expanded Fluorescents Bio-/oxo-/photodegradables additives, nanocomposites <sup>EPBP</sup>
Closing system	Cap not sealed/bonded	PET, transparent or blue or green, <b>not</b> printed PE or PP	PET, transparent or blue or green, printed PET, all color except blue or green, printed or <b>not</b> Other plastics d<1	PET with mineral > 1%, printed or not	Other plastics d>1 (alone or in blend) Metal Wood Thermoset plastic
	Cap sealed/bonded		PET, printed or not, peelable and/or with a water releasable adhesive PE or PP or other plastic d>1; peelable and/or with a water releasable adhesive	PET with mineral > 1%, printed or not	Other plastics d>1 (alone or in blend) Metal Wood Thermoset plastic
	Heat-sealed Lid		Mono or multi lid d<1, without metal; peelable (ex. plastic, plastic/paper) Printed or not PET lid, peelable		Mono or multi lid d<1, <b>not peelable</b>  Mono or multi lid d<1, <b>with metal</b> (ex. plastic/alu, metallization) Mono or multi lid d>1 (except peelable PET) Aluminium lid (peelable or not)
	Bonded lid		Mono or multi lid d<1, without metal; peelable and/or with a water releasable adhesive (ex. plastic, plastic/paper) Printed or not PET lid, peelable and/or with a water releasable adhesive		Mono or multi lid d<1, <b>not peelable and with a not water releasable adhesive</b>  Mono or multi lid d<1, <b>with metal</b> (ex. plastic/alu, metallization) Mono or multi lid d>1 (except peelable PET and/or with a water releasable adhesive) Aluminium lid (peelable or not, washable or not water releasable adhesive)
	Skin				PVC
	Flowpack				
	Stretchable film			Mono or multi film d<1, without metal	

DESIGN	Direct printing on pack	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at 60-80°C, on PET packaging other than transparent green and opaque white		Direct printing - washable ink at 60-80°C Direct printing on PET packaging transparent green or opaque white Metallized ink
	Label on pack or cap	Plastic d <1 (ex. PP, OPP, PE)	Paper	PET on a PET pack which is not green or white/opaque	Other plastic d>1 (ex. PVC, PETg, PS, PET on opaque PET pack and green PET) Multilayer with an alu layer (ex. paper/alu, PET/alu)
	Label on mono or multi lid d<1, without metal	Plastic d <1 (ex. PP, OPP, PE) with a water releasable or not adhesive	Paper with a water releasable adhesive		Paper with not water releasable adhesive Other plastic d>1 (ex. PVC, PETg, PS, PET) Multilayer with an alu layer (ex. paper/alu, PP/alu) <sup>(AG13)</sup>
	Sleeve	pp <sup>(AG15)</sup> , OPP <sup>(AG15)</sup> , PE <sup>(AG17, CSEMP0405)</sup> d <1 <sup>(AG12)</sup>	Other plastics d<1	PET on a PET pack which is not green or white/opaque	Other plastics d>1 (ex. PET on opaque PET pack and green PET, PETG <sup>(AG44)</sup> , PS <sup>(AG42)</sup> , PLA and PVC <sup>(AG08)</sup> ) <sup>(AG12)</sup>
	Adhesive (Label and bonded lid)	Water releasable at 60-80°C in alkaline conditions and residue-free <sup>EPBP</sup>			Not water releasable at 60-80°C in alkaline conditions <sup>EPBP</sup>
	Ink (on label, seal, cap, sleeve)	Without printing Not washable in water at 60-80°C in alkaline conditions <sup>EPBP</sup> (eg. Ink between 2 material layers or on the surface below a varnish layer) EuPIA good practices			Washable (ex. surface printing) Metallic inks
Other elements	Other elements	Element d<1 not bonded or with a water releasable adhesive		RFID Welded or bonded elements with a not water releasable adhesive PVC Aluminium element PETG, PS, PLA elements Thermoset plastics	

## 6.6.7 Recyclability Table – Packaging items excluding HDPE bottles and dispenser bottles

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditionnal	Not Compatible and/or disruptive
BODY	Material	HDPE	Other PE <sup>(AG60)</sup> Surlyn® <sup>(AT-PEHD-14-01)</sup>	PE associated to PP	HDPE associated to other resins (PEHD/PLA, HDPE/PVC, HDPE/PS, HDPE/PET, HDPE/PETG, etc.) Thermoset plastic PE associated to a non plastic material (wood <sup>(AG57)</sup> , ceramic ...)
	Colour (in blend)	Colourless and all colors			Not detectable black colorant in external layer
	Barrier		EVOH with tielayer <sup>(AG52)</sup> Carbon black as an internal layer Coating SiOx, AlOx		Other barriers and resins (multilayers, blends)
	Additive and density		Expanded PE d<1 (gaz, blowing agents) Silicone on surface for unstacking		PE with additive loads that result in d>1 <sup>(AG49)</sup> PE with additive loads and expanded
Closing system	Cap not sealed/bonded	PE	PP Plastic d>1	Metal <sup>(AG02, AG40)</sup>	Wood Other plastic d<1 Thermoset plastics
	Heat-sealed Lid		Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> coating ; peelable Mono or multi lid d>1 , peelable (ex. plastic, plastic/paper, plastic/alu)	Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating ; <b>not peelable</b> Peelable aluminium lid	Mono or multi lid d<1 Mono or multi lid d>1 <b>not peelable</b> Not Peelable aluminium lid
	Bonded lid		Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating ; peelable and/or with a water releasable adhesive Mono or multi d>1, peelable and/or with a water releasable adhesive (ex. plastic, plastic/paper, plastic/alu)	Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating ; <b>not peelable and with not water releasable adhesive</b> Peelable aluminium lid and/or with a water releasable adhesive	Mono or multi lid d<1 Mono or multi lid d>1 <b>not peelable and</b> with a not water releasable adhesive Not peelable aluminium lid and with a not water releasable adhesive
	Skin				PVC
	Flowpack				
	Stretchable film		Film d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating Mono or multi film d>1 (except PVC)		Mono or multi film d<1 PVC



DESIGN	Direct printing on pack	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at room temperature EuPIA Good pratics		Direct printing - washable ink at room temperature Metallic ink
	Label on pack or cap	PE with a water releasable adhesive (without covering conditions) PP, OPP with a water releasable adhesive (AG15)	Paper with a water releasable adhesive Paper wrapping with a line of not water releasable adhesive PE with a not water releasable adhesive Plastic d>1 with a water releasable adhesive (ex. PET, PETG, PS (AG43)) PE based IML	PSL Paper with a not water releasable adhesive PP, OPP with not water releasable adhesive PP based IML	PVC (AG14) Other plastics d<1 Other plastics d>1 with a not water releasable adhesive Multilayers with an alu layer (ex. PP/alu) (AG45) IML with a different plastic resine than the pack body
	Label on mono or multi lid d>1	Paper with a water releasable or not adhesive Plastic d>1 (ex. PET, PETG, PS) with a water releasable or not adhesive	PP, OPP, PE with a water releasable adhesive		PP, OPP, PE with a not water releasable adhesive PVC Other plastics d<1 Multilayers with an alu layer (ex. PP/alu)
	Label on lid d<1 in PE, PP, EVOH, surlyn, coating ; peelable	PP, OPP, PE with a water releasable or not adhesive	Paper with a water releasable adhesive Plastic d>1 (ex. PET, PETG, PS) with a water releasable adhesive		Paper with a not water releasable adhesive Plastic d>1 (ex. PET, PETG, PS) with a not water releasable adhesive PVC Other plastics d<1 Multilayers with an alu layer (ex. PP/alu)
	Sleeve	PE without covering conditions (AG18, ESEMPO405) PP, OPP (AG16, AG12)	PS (AG43), PETG, PET		PVC (AG14, AG12), PLA
	Adhesive (Label and bonded lid)	Water releasable at room temperature and without residue on pack			Not water releasable at room temperature
	Ink (on label, seal, cap, sleeve)	Without printing Not washable at room temperature (ex. Ink between 2 material layers or on the surface below a varnish layer) EuPIA good pratics			Washable at room temperature (ex. surface printing) Metallic inks
Other elements	PE element not bonded or with a water releasable adhesive	PET, PETG, PS elements not bonded or with a water releasable adhesive	Aluminium element not bonded or with a water releasable adhesive	RFID bonded element with a not water releasable adhesive PVC, PLA Thermoset plastics Foam element d<1	

## 6.6.8 Recyclability Table – Packaging items excluding PP bottles and dispenser bottles

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditionnal	Not Compatible and/or disruptive
BODY	Material	PP		PP associated with PE	PP associated with another resin (PP/PLA, PP/PVC, PP/PS, PP/PET, PP/PETG, etc.) PP associated with a non plastic material (wood <sup>(AG57)</sup> , ceramic ...)
	Colour (in blend)	Colourless and all colours			Not detectable black colorant in external layer
	Barrier		EVOH with tielayer* <sup>(AG53)</sup> Kapseal <sup>®</sup> (AT1601) Black carbon as an internal layer Coating SiOx, AlOx		Other barriers and resins (multilayers, blends)
	Additive and density		Expanded PP d<1 (gaz, blowing agent) Silicone on surface for unstacking		PP with additive loads that result in d>1 <sup>(AG50)</sup> PP with additive loads and expanded
losing system	Cap not sealed/bonded	PP	PE Plastic d>1	Metal <sup>(AG 11)</sup>	Wood Other plastic d<1 Thermoset plastics
	Heat-sealed Lid		Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> coating ; peelable Mono or multi lid d>1 , peelable (ex. plastic, plastic/paper, plastic/alu)	Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating ; <b>not peelable</b> Peelable aluminium lid	Mono or multi lid d<1 Mono or multi lid d>1 <b>not peelable</b> Not Peelable aluminium lid <sup>(AG11)</sup>
	Bonded lid		Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> coating ; peelable and/or with a water releasable adhesive Mono or multi d>1 , peelable and/or with a water releasable adhesive (ex. plastice, plastic/paper, plastic/alu)	Lid d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating ; <b>not peelable and with not water releasable adhesive</b> Peelable aluminium lid and/or with a water releasable adhesive	Mono or multi lid d<1 Mono or multi lid d>1 <b>not peelable and</b> with a not water releasable adhesive Not peelable aluminium lid and with a not water releasable adhesive
	Skin				PVC
	Flowpack				
	Stretchable film		Film d<1 in PE, PP, EVOH with tielayer, surlyn <sup>(AT-PEHD-14-01)</sup> , coating Mono or multi film d>1 (except PVC)		Mono or multi film d<1 PVC

DESIGN	<b>Direct printing on pack</b>	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at room temperature Good pratics EuPIA		Direct printing - washable ink at room temperature Metallic ink
	<b>Label on pack or cap</b>	PP, OPP with a water releasable adhesive (without covering conditions) <sup>(AG16)</sup> PE with a water releasable adhesive	Paper with a water releasable adhesive Paper wrapping with a line of not water releasable adhesive PP, OPP wiht a not water releasable adhesive Plastic d>1 with a water releasable adhesive (ex. PET, PETG, PS <sup>(AG43)</sup> ) PP based IML	PSL Paper with a not water releasable adhesive PE with a not water releasable adhesive PE based IML	PVC <sup>(AG14)</sup> Other plastics d<1 Other plastics d>1 with a not water releasable adhesive Multilayer with an alu layer (ex. PP/alu) <sup>(AG11)</sup> IML with a different plastic resine than the pack body
	<b>Label on Mono or multi lid d&gt;1</b>	Paper with a water releasable or not adhesive Plastic d>1 (ex. PET, PETG, PS) with a water releasable or not adhesive	PP, OPP, PE with a water releasable adhesive		PP, OPP, PE with a not water releasable adhesive PVC Other plastics d<1 Multilayers wiht an alu layer (ex. PP/alu)
	<b>Label on Lid d&lt;1 in PE, PP, EVOH with tielayer, surlyn coating ; peelable</b>	PP, OPP, PE with a water releasable or not adhesive	Paper with a water releasable adhesive Plastic d>1 (ex. PET, PETG, PS) with a water releasable adhesive		Paper with a not water releasable adhesive Plastic d>1 (ex. PET, PETG, PS) with a not water releasable adhesive PVC Other plastics d<1 Multilayers with an alu layer (ex. PP/alu)
	<b>Sleeve</b>	PP, OPP without covering conditions PE <sup>(AG18, CSEMP0405)</sup>	PS, PETG, PET		PVC, PLA
	<b>Adhesive (Label and bonded lid)</b>	Water releasable at room temperature and without residue on pack			Not water releasable at room temperature
	<b>Ink (on label, seal, cap, sleeve)</b>	Without printing Not washable at room temperature (ex. Ink between 2 material layers or on the surface below a varnish layer) Good pratics EuPIA			Washable at room temperature (ex. surface printing) Metallic inks
Other elem	Other elements	PP element not bonded or with a water releasable adhesive	PET, PETG, PS elements not bonded or with a water releasable adhesive	Aluminium element not bonded or with a water releasable adhesive	RFID bonded element with a not water releasable adhesive PVC, PLA Thermoset plastics Foam element d<1

### 6.6.9 Recyclability Table – Flexible LDPE packaging items

COTREP		Full Compatibility – Ideal	Tolerated compatibility	Limited compatibility - Conditional	Not Compatible and/or disruptive
BODY	Material	PEBD	Other PE Oriented PE		PE associated with other resin (PE/PET, PE/PP, etc.) PE associated with a non plastic material (wood, ceramic, etc.) Thermoset plastic Other resin : PP, PET, PLA, starch based, etc.
	Colour (in blend)	Colourless and all colours			Not detectable black colorant in external layer
	Barrier		EVOH with tielayer Black carbon in internal layer	Coating SiOx, AlOx	PA Aluminium laminate Other barriers and resins (multilayers, blends)
	Additive and density		Expanded/foamed PE d<1 (gaz, blowing agents)		PE with additive loads that result in d>1 PE with additive loads and expanded/foamed d<1 Bio-/oxo-/photodegradables additives, nanocomposites
Closing system	Caps and other (zip, ...)	PE	Plastic d>1 (except PVC)	Paper PP, OPP Textile	Other plastics d<1 Metal Thermoset plastic Not detectable/sorting black color element d<1 (except PE) PVC
Design	Direct printing on pack	Without printing Laser marked Production or expiry date mark	Direct printing - not washable ink at room temperature Good pratics EuPIA		Direct printing - washable ink at room temperature Metallic ink
	Label on film	PE with a water releasable adhesive (without covering conditions)	Paper with a water releasable adhesive PE wiht a not water releasable adhesive Plastic d>1 with a water releasable adhesive (ex. PET, PETG, PS)	Paper with a not water releasable adhesive PP, OPP	PVC Other plastics d<1 Other plastics d>1 with a not water releasable adhesive Multilayer with an alu layer (ex. PE/alu)
	Adhesive (Label- and bonded lid)	Water releasable at room temperature and without residue on pack			Not water releasable at room temperature
	Ink (on label)	Without printing Not washable at room temperature (ex. Ink between 2 material layers or on the surface below a varnish layer) Good pratics EuPIA			Washable at room temperature (ex. surface printing) Metallic inks
Other elem	Other elements	PE Handle		PP, OPP Handle Reinforcement for handle in paper	Thermoset PE handle Reinforcement for handle in PS d<1 PVC

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