



DESIGN FOR RECYCLING GUIDELINES FOR
PET THERMOFORMED TRAYS
CLEAR TRANSPARENT TO BE RECYCLED EVEN IN FOOD APPLICATIONS

	YES Full compatibility – 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 PET recycling	CONDITIONAL Limited compatibility – 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 PET recycling	NO Low compatibility – materials that failed the testing protocols OR materials that have not been tested (yet), but pose a high risk of interfering with PET recycling	ASSESSING PROTOCOLS
Packaging	PET	delaminating PET/PE; PET-GAG structure	PLA; PVC; PS; PETG; C-PET any PET based multi-layer material apart from delaminating PET/PE and PET-GAG, Expanded PET	
Size				
Colours	transparent clear; transparent light blue		other transparent colours; opaque; metallic	
Barrier	None; PET based oxygen scavenger with no yellowness effects after EPBP oven test	PET based oxygen scavenger with limited yellowness effects after EPBP oven test	EVOH, PA; any other barrier; any other oxygen scavenger	EPBP oven test
Additives	Silicone surface coating (on coating area); Antiblocking masterbatch (max 3%)	UV stabilisers; AA blockers; optical brighteners; antiblocking masterbatch (> 3%); anti-stat agents; anti-blocking agents; anti-fogging agents (on coating area)	Bio/Oxo/Photodegradable additives; Nanocomposites	
UNPRINTED Lidding films - Closure systems (with glue not harming the recycling process)	PET; floating combination of plastics with density < 1 g/cm3 (floating to be proven with sink/float test); in any case with no glue residuals (to be proven with glue removal test and oven test)		any other sinking film with density > 1 g/cm3 (to be proven with sink/float test)	EPBP sink/float test - EPBP glue removal test - EPBP oven test
PRINTED Lidding films - Closure systems (with glue not harming the recycling process)	plastics or combination of floating plastics with density < 1 g/cm3 (to be proven with sink/float test) and with no glue residuals (to be proven with glue removal test and oven test); foamed PET based films where foamed structure is not getting destroyed @ 90°C		any other film	EPBP sink/float test - EPBP glue removal test - EPBP oven test
Labels (with adhesive not harming the recycling process - see labels adhesive section)	Plastic labels where label has a density < 1 g/cm3 in the more heavily printed and adhesive area	BPA-Free Paper labels not loosing fibers (pulping) -	Plastic labels where label has a density > 1 g/cm3 in the more heavily printed and adhesive area - Paper labels loosing fibers (pulping) - Paper containing BPA	
Labels Adhesive	adhesives with 100% removing ratio and no adhesive residuals on flakes @ 70°C testing temperature	adhesives with 100% removing ratio and no adhesive residuals on flakes @ 85°C testing temperature	all other adhesives	Petcore Europe - PET thermoforms WG - adhesive removal on trays protocol
Adhesives on parts different than lidding films and labels	Water or alkali soluble in 60-80°C.		any other adhesive	EPBP glue removal test
Inks	Non toxic, follow EUPIA Guidelines		Inks that bleed; toxic or hazardous inks	
Direct Printing	Laser marked	minimal direct printing, e.g. production or expiry date	Any other direct printing	
Other Components	preferably no other components	Inserts in HDPE / LDPE / PP, Soaker pads, bubble pads and paper & carboard - all inserts should be completely removable and leave no traces	PVC / PS / EPS / PU / PA (Nylon); PC / PMMA Thermoformed plastics / metals; non compliant soaker pads	

This work is published by PETCORE Europe with experts in the plastics packaging and recycling industry. The information contained in this document is **for general guidance only**. Any details given are intended as a general recommendation based on the best of our knowledge at the time of publication. It does not necessarily guarantee compliance with the different recycling schemes. This is by no means an exhaustive list. Users are therefore advised to make their own enquiries with Petcore Europe - Thermoforms Working Group, local recyclers or recycling organisations to check for specific and up-to-date information.

It is important to note that this is a **living or dynamic document** which will be continually edited, updated and expanded by our panel of experts as more information becomes available. This means that a certain product and/or material classification may change in future. Users are therefore advised to check the website for the latest information.

We value your **feedback** because it will help us to develop this publication even more and to make it a useful tool for you and other actors in the PET value chain. We appreciate you taking the time to let us know what you think about Design for Recycling Guidelines for PET Thermoforming Trays, so please send your comments and/or additional information to Petcore Europe (www.petcore-europe.org).