

Clear Plastic Packaging Cost / Performance Matrix

Clear Visual Pkg	Cost Index	Spec Gravity	Yielded Cost Index	RF Seal	Face Seal	Forming	Cutting	Heat Deflection Temp	Impact Strength *ASTM D1709 at 26" drop 73* F	Recyclable (tech/ local)	Percent Oil Derivative Feedstock
PVC	X	1.33	X	Standard	Standard w/ water or solvent based cards	Standard forming practices	Standard steel rule die	167* F	415 grams Very high Controlled through formulation	Yes / Only recycled within industry	44% (56% Salt – NaCl derivative)
APET	1.2X	1.33	1.2X	No - Crystallizes	Solvent based cards or water based fold over cards	Slightly faster than PVC +5% throughput	Requires heated die and increased knife changes	149* F	425 grams Very high	Yes / APET bottles recycled in most localities in US & Canada	Up to 100%
RPET	1.1X	1.33	1.1X	No - Crystallizes	Same as APET	Slightly faster than PVC +5% throughput	Same as APET w/ some brittlenesses	149* F	425 grams High – controlled Industrial regrind	Same as APET	Up to 100%
RPET (25% PCR)	1.2X	1.33	1.2X	No - Crystallizes	Same as APET	Slightly faster than PVC +5% throughput	Same as APET w/ some brittlenesses	149* F	425 grams High with potential for inconsistent regrind	Same as APET	Up to 100%
PETG	2X	1.27	1.9X	Standard	Standard w/ water or solvent based cards	Slightly faster than PVC +5% throughput	Standard steel rule die	145* F	425 gram Very high	Yes / Only recycled within industry	Up to 100%
PLA	1.12X	1.24	1.1x	Standard	Standard w/ water or solvent based cards	Slightly lower heats than APET	Requires heated die and increased knife changes	105* F to as high as 130* F		Yes / Recyclable in industry. Biodegradable and composting method.	0%

