

Comparison of Bottle Polymer Properties

Resin	Density (g/ml)	MVTR ₁	Oxygen ₂	Stiffness ₃	Impact Resist	Hot Fill Max (F)
PET-G	1.33	4.0	100	300	Fair	160
O-PET	1.36	2.0	75	450	Excellent	160
PET (hot fill)	1.37	1.8	55	550	Excellent	188
PP (polypropylene)	0.91	0.5	3,500	200	Fair	200
O-PP (oriented)	0.91	0.3	2,500	250	Good	220
PVC (polyvinylchloride)	1.35	3.0	150	300	Fair	160
HDPE (high density polyethylene)	0.96	0.5	4,000	150	Excellent	160

₁ g/mil/100 sq in - 24 hrs

₂ cc/mil/sq m - 24 hrs

₃ Flexural modulus (jpsi x 1000)