## WHICH SYNTHETIC IS RIGHT?



Choosing the right synthetic substrate is critical to ensuring both performance and cost-efficiency. This chart compares four of the most commonly used synthetic polymers—Polypropylene (PP), Polyester (PET), Polyvinyl Chloride (PVC), and Polystyrene (PS). Each material offers unique properties that make it suitable for specific applications. Many brands are known by name rather than their actual polymer type. Knowing what plastic polymer corresponds to each brand is critical to evaluating the fit. Use this side-by-side guide to match materials for your project.

	PP	PP	PVC	PS	PET
	<b>Polypropylene</b> Xquisite™	<b>Polypropylene</b> UniSyn®	<b>Polyvinyl Chloride</b> Rigid Vinyl (PVC)	<b>Polystyrene</b> Styrene	Polyester
TEAR RESISTANCE	Average	Good	Average	Poor - Brittle	Excellent
FOLDABILITY	Excellent	Good with Scoring	Poor - Ideal for Flat Applications	Flat Applications Only	Poor
WATER RESISTANCE	Excellent	Excellent	Excellent	Excellent	Excellent
UV RESISTANCE	Average	Average	<b>G</b> ood	Indoor Use Only	Excellent
CHEMICAL RESISTANCE <sup>1</sup>	Excellent	Excellent	Average	Poor	<u> </u>
THERMAL STABILITY	Good	Average	Average	<b>C</b> Good	Excellent
COST	Low	<b>C</b> Low	<b>U</b> Low	<b>U</b> Low	High
RIGIDITY	Balanced - Semi-Rigid	Soft & Flexible	Good Rigidity	Good Rigidity	Excellent Rigidity
WHITE LEVEL	Warm White	Neutral White	Neutral White	Cool White	Warm White
COMMON USES	<ul> <li>Menus and Manuals</li> <li>Produce/Deli Signage</li> <li>Shelf Talkers/Danglers</li> <li>Retail Displays</li> <li>Maps</li> </ul>	<ul> <li>Menus and Manuals</li> <li>Compliance Posters</li> <li>IDs, Tags &amp; Cards</li> <li>Wristbands</li> <li>Certificates &amp; Documents</li> </ul>	<ul> <li>Signage &amp; Placards</li> <li>Shelf Danglers/ Wobblers</li> <li>Membership &amp; Gift Cards</li> <li>Door Hangers</li> <li>Temporary License Plates</li> </ul>	<ul> <li>Point-of-Purchase Signage</li> <li>Backlit Displays</li> <li>Push/Pull Graphics</li> <li>Gift, Loyalty, Library Fundraising Cards</li> </ul>	<ul><li>Lockout Tags</li><li>Gas Pump Talkers</li><li>Menus</li><li>Field &amp; Safety Manuals</li><li>Parking Tags</li></ul>

¹ Chemical resistance is in relation to the polymer itself & not necessarily indicative of post print chemical resistance.