

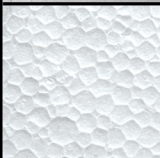






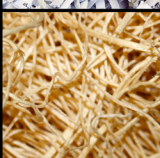


# CUSHION PACKAGING CHART

Learn more from the packaging experts at [ValleyBox.com](http://ValleyBox.com) or call 866.449.2882



PRODUCTS		PERCEIVED ADVANTAGES		POTENTIAL DISADVANTAGES	
	<b>Polyethylene (PE)</b>	<ul style="list-style-type: none"> <li>Multiple-impact protection</li> <li>Lightweight</li> <li>Flexible</li> <li>Higher load-bearing capacity than PU</li> </ul>	<ul style="list-style-type: none"> <li>Unaffected by chemicals</li> <li>Resilient</li> <li>Easily fabricated</li> <li>Available with antistatic and fire-retardant additives</li> </ul>	<ul style="list-style-type: none"> <li>Slightly abrasive</li> <li>Requires fabrication</li> <li>Relatively expensive</li> </ul>	<ul style="list-style-type: none"> <li>Requires storage space</li> <li>Less "thickness-efficient" than PU</li> </ul>
	<b>Expandable Polystyrene (EPS)</b>	<ul style="list-style-type: none"> <li>Rigid</li> <li>Lightweight</li> <li>Good esthetics</li> <li>Relatively inexpensive</li> </ul>	<ul style="list-style-type: none"> <li>Manufacturing can be automated</li> <li>Available with anti-static and fire-retardant additives</li> </ul>	<ul style="list-style-type: none"> <li>Equipment cost</li> <li>Design development time</li> </ul>	<ul style="list-style-type: none"> <li>Lacks multiple-impact protection</li> <li>Requires storage space</li> </ul>
	<b>Resilient Moldable Beads (RMBs)</b>	<ul style="list-style-type: none"> <li>Same as EPS</li> <li>Provides multiple-impact protection</li> </ul>		<ul style="list-style-type: none"> <li>Equipment cost</li> <li>Raw material cost</li> <li>Compressive creep</li> </ul>	<ul style="list-style-type: none"> <li>Requires storage space</li> </ul>
	<b>Polyurethane (PU)</b>	<ul style="list-style-type: none"> <li>Lightweight</li> <li>Flexible</li> <li>Resilient</li> <li>Provides multiple-impact protection</li> </ul>	<ul style="list-style-type: none"> <li>Relatively inexpensive</li> <li>Available with anti-static and fire-retardant additives</li> </ul>	<ul style="list-style-type: none"> <li>Low load-bearing capacity</li> <li>Material variations</li> <li>Cushion design data often unavailable</li> </ul>	<ul style="list-style-type: none"> <li>Requires storage space</li> <li>Requires fabrication</li> </ul>
	<b>Polyurethane Foam-in-Place</b>	<ul style="list-style-type: none"> <li>Cost-effective</li> <li>Minimal storage space required</li> <li>Low density</li> </ul>	<ul style="list-style-type: none"> <li>No need for sophisticated custom design</li> <li>Ability to package onsite as needed</li> <li>Can be automated</li> </ul>	<ul style="list-style-type: none"> <li>Lacks multiple-impact protection</li> <li>Cushion thickness must often be increased</li> <li>Large volumes required</li> <li>Capital investment</li> </ul>	<ul style="list-style-type: none"> <li>Equipment maintenance</li> <li>Messy</li> <li>Labor intensive</li> <li>Handling/storage/disposal of on-site chemicals</li> </ul>
	<b>Expandable Polystyrene (EPS Loose-Fill)</b>	<ul style="list-style-type: none"> <li>Inexpensive</li> <li>Doesn't use floor space</li> </ul>	<ul style="list-style-type: none"> <li>Lightweight</li> <li>Easy to use</li> <li>Reduces labor costs</li> <li>Reduces shipping costs</li> </ul>	<ul style="list-style-type: none"> <li>Settles</li> <li>Messy</li> </ul>	<ul style="list-style-type: none"> <li>Not designed for heavy objects</li> </ul>
	<b>Foam Wraps:</b> <b>Polypropylene (PP)</b> <b>Polyethylene (PE)</b> <b>Polyurethane (PU)</b>	<ul style="list-style-type: none"> <li>Good drapability</li> <li>Lightweight</li> <li>Flexible</li> <li>Lightweight</li> <li>Flexible</li> <li>Soft</li> <li>Relatively inexpensive (less than PP or PE)</li> </ul>	<ul style="list-style-type: none"> <li>Soft</li> <li>Thin gauge</li> <li>Heat sealable</li> <li>Uniform cell size</li> <li>Heat sealable</li> <li>Lightweight</li> <li>Flexible</li> <li>Soft</li> </ul>	<ul style="list-style-type: none"> <li>Nonuniform in appearance</li> <li>Relatively expensive</li> <li>Easily compressed</li> </ul>	<ul style="list-style-type: none"> <li>Relatively expensive</li> <li>Doesn't provide a moisture barrier</li> </ul>
	<b>Cellulose wadding</b>	<ul style="list-style-type: none"> <li>Better cushioning and aesthetics than plain paper</li> <li>Absorbent (bottled chemical applications)</li> </ul>		<ul style="list-style-type: none"> <li>Same as shredded or wadded paper</li> </ul>	<ul style="list-style-type: none"> <li>Absorbency can cause moisture retention and weaken packaging</li> </ul>
	<b>Shredded/wadded paper</b>	<ul style="list-style-type: none"> <li>Cheap</li> <li>Plentiful</li> <li>Disposable</li> </ul>		<ul style="list-style-type: none"> <li>Inconsistent protection</li> <li>Crushes</li> <li>Susceptible to moisture</li> </ul>	<ul style="list-style-type: none"> <li>Labor-intensive application</li> <li>Adds to shipping costs</li> <li>Poor esthetics</li> </ul>
	<b>Excelsior</b>	<ul style="list-style-type: none"> <li>Few, if any, when compared with other packaging materials</li> <li>Adds to premium look of wine and gourmet foods packaging</li> </ul>		<ul style="list-style-type: none"> <li>Labor intensive</li> <li>Messy</li> <li>More expensive than paper</li> </ul>	<ul style="list-style-type: none"> <li>Heavier than paper</li> <li>Susceptible to infestation</li> </ul>