



### Comparative Material Matrix

Material	Barrier Properties				Physical Properties			Performance Properties		
	Construction	Durability	Chemical	Ease of Decontamination	Weight	Thickness	Trap Tear	Operating Temperatures	Flame Resistance	Fungus Resistance
Challenge UltraPro® Vapor	5 Layer 3 barrier films	Excellent	Best	Best	14.5	22 mil	Not Tested	-40 F to 500 F	Best (1)	No Growth
Challenge UltraPro® Splash	3 Layer 2 barrier films	Very Good	Excellent	Best	10.2	19 mil	Not Tested	-40 F to 500 F	Best (1)	No Growth
Challenge® X-22	3 Layer 2 barrier films	Very Good	Excellent	Best	13	15.5 mil	Excellent	-40 F to 500 F	Best (2)	No Growth
Challenge® X-23	5 Layer 3 barrier films	Excellent	Best	Best	15.5	15 mil	Best	-40 F to 500 F	Best (2)	No Growth
Raydel® SX-12	3 Layer 2 barrier films	Very Good	Excellent	Best	13	15.5 mil	Excellent	-40 F to 500 F	Best (2)	No Growth

Challenge® and Raydel® are registered trademarks

(1) Tested to ASTM 1358

(2) Tested to MIL-STD-191 5903.1