



Flow Smart is the only US manufacturer of a TFM bonded Envelope gasket. We chose TFM over PTFE due to the superior performance characteristics in the critical areas of Void Content, Permeability, Reduced Creep and Cold Flow, reduction in Permanent Deformation under Load, improved Elastic Modulus, and significantly improved Surface Finish whether molding or machining. Please review our TFM versus PTFE* data for your reference:

Property	Test Method	TFM Results	PTFE Results	Affect on Sanitary Gasket:
Void Content	Dyneon Method	0.26	0.75	Less void limit material pass through, entrapment and extends gasket life
Permeability Chemical Tested:	ASTM D 3985			Results show TGM significantly resists permeability risks with critical chemicals
SO ² (@23°C)		210	310	TFM Permeability resistance is 33% greater
HC ¹ (@54°C)		460	640	TFM Permeability resistance is 29% greater
Cl ² (@54°C)		160	320	TFM Permeability resistance is 50% greater
Reduction Deformation Under Load	ASTM D 621 100 hours at 74 F	4%	11%	Reduction of deformation aids in the memory of a gasket material. The elastomer backing further improves memory.
Tensile Strain	Tensile Strain At 23°C At 100°C (212 F)	2% <1%	4% 7%	The tensile strain of PTFE gets considerably worse as temperatures increase. Strain shown here is worse at steam level, which is critical for SIP use. Strain translates to much lower tensile flow in TFM than PTFE.