

PTFE silica sheeting - GYLON style 3501-E

Material properties

Color	Brick
Composition	PTFE with silica
Fluid services	Strong acids (except hydrofluoric), steam, solvents, hydrocarbons, chlorine and cryogenics
Temperature ⁽¹⁾ °C (°F)	
Minimum	-268°C (-450°F)
Continuous max	+260°C (500°F)
Pressure ⁽¹⁾ , maximum bar (psig)	83 (1200)
P x T (max.) ⁽¹⁾ , bar x °C (psig x °F)	
1/32" and 1/16"	12,000 (350,000)
1/8"	8,600 (250,000)
Flammability	Will not burn
Bacterial growth	Will not support

Typical physical properties*

ASTM F36	Compressibility, average, %:	7-12
ASTM F36	Recovery, %:	40
ASTM F38	Creep Relaxation, %:	18
ASTM F152	Tensile, Across Grain, N/mm ² (psi):	13.8 (2000)
ASTM D792	Specific Gravity:	2.10
ASTM D1708	Modulus @ 100% Elongation, N/mm ² (psi):	11.0 (1600)
ASTM F433	Thermal Conductivity (K), Btu·in./hr·ft ² ·°F:	2.88
ASTM F104	Line call out	F451999A9B4E99K6M6 ⁽²⁾

Sealing characteristics*

	ASTM F37B - Fuel A
Gasket load N/mm ² (psi)	7 (1000)
Internal pressure bar (psig)	0.7 (9.8)
Leakage	0.22 ml/hr

This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties based on 1/32" (0.8mm) sheet thickness unless otherwise mentioned.

* Values do not constitute specification Limits

¹ Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult us.

² Increase in IRM Oil #903 (fourth numeral 9 is thickness, fifth numeral 9 is weight): Thickness = 1.0% max, Weight = 2.0% max. Sixth numeral 9: % Increase in Water: Weight = 1.0% max. A9: Leakage in Fuel A (Isooctane), Gasket Load = 1,000psi (7.0N/mm²), Pressure = 9.8psig (0.7bar): Typical = 0.22ml/hr, Max = 1.0ml/hr. E99: % Increase in ASTM Fuel B: Weight: 2.0% max., Thickness: 1.0% max.