

GYLON® Style 3502 - OXYGEN SERVICE

MATERIAL PROPERTIES*:

Color: Fawn

Composition: PTFE with silica

Fluid Services (see chemical resistance guide): Oxygen service, solvents, hydrocarbons, strong acids (except

hydrofluoric), steam, chlorine and cryogenics

Temperature¹, °F (°C)

Minimum: -450 (-268)

Maximum: +500 (+260)

Ideal Operating Limit: +400 (+204)

Pressure¹, psig (bar):

Minimum: Full Vacuum
Maximum: 1200 (83)
Ideal Operating Limit: 750 (52)

 $P \times T (max.)^1$, psig x °F (bar x °C):

1/32 and 1/16": 350,000 (12,000) 1/8" 250,000 (8,600)

Flammability: Will Not Support Flame

Bacterial Growth: Will Not Support

Meets Specifications: FDA (Food and Drug Administration) and USDA (US Department of

Agriculture)

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility, average, %:	7-1	2	
ASTM F36	Recovery, %:	40	1	
ASTM F38	Creep Relaxation, %:	18		
ASTM D1708	Tensile, Across Grain, psi (N/mm²):	2000 (13.8)	
ASTM D792	Specific Gravity:	2.1	0	
ASTM D1708	Modulus @ 100% Elongation, psi (N/mm ²):	1600 (11.0)		
ASTM F433	Thermal Conductivity (K), W/m°K (Btu.·in./hr.·ft.².°F):	0.36-0.45 (2.50-3.15)		
ASTM D149	Dielectric Properties, range, volts/mil.			
	Sample conditioning	<u>1/1</u> 0	<u>6"</u>	<u>1/8"</u>
	3 hours at 250°F	362 -		-
	96 hours at 100% Relative Humidity:	61 -		-
ASTM F586	Design Factors	<u>1/16" & Under</u> <u>1/8"</u>		<u>1/8"</u>
	"m" factor:	5.0 5		5
	"y" factor, psi (N/mm²):	2750 (19.0) 3500 (2		3500 (24.1)
ROTT	Gasket Constants:			
	1/16"	Gb=949	a=0.253	Gs=2.6
	1/8"	Gb=1980	a=0.169	Gs=0.393

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	DIN 3535 - Nitrogen
Gasket Load, psi (N/mm2):	1000 (7)	4640 (32)
Internal Pressure, psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.22 ml/hr.	<0.015 cc/min

Notes:

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 Garlock Applications Engineering. Minimum temperature rating is conservative.

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^{*} 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