

GYLON® Style 3510

MATERIAL PROPERTIES*:

Color: Off – White

Composition: PTFE with barium sulfate

Fluid Services (see chemical resistance guide): Strong caustics, moderate acids, chlorine, gases, water, steam,

cryogenics, hydrocarbons and aluminum fluoride

Temperature¹, °F (°C)

Minimum: -450 (-268)
Maximum: +500 (+260) **Pressure**¹, Maximum, psig (bar): 1200 (83)

 $P \times T (max.)^1$, 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: ABS (American Bureau of Shipping), FDA (Food and Drug

Administration) 21 CFR 177.1550

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility, average, %:	4-10		
ASTM F36	Recovery, %:	40		
ASTM F38	Creep Relaxation, %:	11		
ASTM D1708	Tensile, Across Grain, psi (N/mm²):	2000 (13.8)		
ASTM D792	Specific Gravity:	2.80		
ASTM D1708	Modulus @ 100% Elongation, psi (N/mm ²):	1400 (9.6)		
ASTM F433	Thermal Conductivity (K), W/m°K (Btu.·in./hr.·ft.²·°F):	0.29-0.38 (2.00-2.65)		
ASTM D149	Dielectric Properties, range, volts/mil.			
	Sample conditioning	<u>1/1</u>	<u>6"</u>	<u>1/8"</u>
	3 hours at 250°F	466 ⁽²⁾		-
	96 hours at 100% Relative Humidity:	59 -		-
ASTM F586	Design Factors	<u>1/16" & Under</u> <u>1/</u>		<u>1/8"</u>
	"m" factor:	2.0 2.0		2.0
	"y" factor, psi (N/mm²):	2350 (16.2) 2500 (17.		2500 (17.2)
ROTT	Gasket Constants:			
	1/16"	Gb=289	a=0.274	Gs=6.61x10 ⁻¹¹
	1/8"	Gb=444	a=0.332	Gs=1.29x10 ⁻²

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	0.04 ml/hr.	<0.015 cc/min

Notes

12/1/2016



^{*} 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

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.

² Indicates that the current arced around and not through the gasket. Dielectric strength will be higher than published.