

GYLON® Style 3505 – OXYGEN SERVICE



MATERIAL PROPERTIES*:

Color:	Blue
Composition:	PTFE with Aluminosilicate microspheres
Fluid Services (see chemical resistance guide):	Oxygen service, Moderate concentrations of acids, some caustics, hydrocarbons, solvents, hydrogen peroxide, refrigerants and cryogenics
Temperature¹, °F (°C)	
Minimum:	-450 (-268)
Maximum:	+500 (+260)
Pressure¹, Maximum, psig (bar):	800 (55)
P x 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:	NSF 61 (National Sanitation Foundation) approved for potable water, FDA Compliant 21 CFR 177.1550

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility, average, %:	25-45	
ASTM F36	Recovery, %:	30	
ASTM F38	Creep Relaxation, %:	40.0	
ASTM D1708	Tensile, Across Grain, psi (N/mm²):	2000 (13.8)	
ASTM D792	Specific Gravity:	1.70	
ASTM D1708	Modulus @ 100% Elongation, psi (N/mm²):	1500 (10.3)	
ASTM F433	Thermal Conductivity (K), W/m²K (Btu.in./hr.ft.².°F):	0.14-0.24 (1.00-1.65)	
ASTM D149	Dielectric Properties, range, volts/mil.		
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>
	3 hours at 250°F	318	-
	96 hours at 100% Relative Humidity:	245	-
ASTM F586	Design Factors	<u>1/16" & Under</u>	<u>1/8"</u>
	"m" factor:	3.0	2.5
	"y" factor, psi (N/mm ²):	1650 (11.4)	3000 (20.7)
ROTT	Gasket Constants:		
	1/16"	Gb=183	a=0.357 Gs=4.01x10 ⁻³
	1/8"	Gb=1008	a=0.221 Gs=2.23

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	DIN 3535 – Nitrogen
Gasket Load , psi (N/mm ²):	1000 (7)	4640 (32)
Internal Pressure , psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.12 ml/hr.	<0.015 cc/min

Notes:

* 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.

12/1/2016