

## GYLON® Style 3505 – OXYGEN SERVICE



### MATERIAL PROPERTIES\*:

<b>Color:</b>	Blue
<b>Composition:</b>	PTFE with Aluminosilicate microspheres
<b>Fluid Services</b> (see chemical resistance guide):	Oxygen service, many acids, some caustics, hydrocarbons, solvents, hydrogen peroxide, refrigerants and cryogenics
<b>Temperature<sup>1</sup>, °F (°C)</b>	
Minimum:	-450 (-268)
Maximum:	+500 (+260)
<b>Pressure<sup>1</sup>, Maximum, psig (bar):</b>	800 (55)
<b>P x T (max.)<sup>1</sup>, psig x °F (bar x °C):</b>	
1/32 and 1/16":	350,000 (12,000)
1/8"	250,000 (8,600)
<b>Flammability:</b>	Will Not Support Flame
<b>Bacterial Growth:</b>	Will Not Support
<b>Meets Specifications:</b>	NSF 61 (National Sanitation Foundation) approved for potable water, FDA Compliant 21 CFR 177.1550

### TYPICAL PHYSICAL PROPERTIES\*:

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

### SEALING CHARACTERISTICS\*

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

#### 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

<sup>1</sup> 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.

5/15/2019