



## Garlock FAWN GYLON® 3500

### MATERIAL PROPERTIES\*

<b>Color:</b>	Fawn
<b>Composition:</b>	PTFE with silica
<b>Fluid Services<sup>1</sup>:</b>	Strong acids (except hydrofluoric), steam, solvents, hydrocarbons, chlorine and cryogenics
<b>Temperature<sup>2</sup>, °F (°C)</b>	
Minimum:	-450 (-268)
Continuous Max:	+500 (+260)
<b>Pressure<sup>2</sup>, Maximum, psig (bar):</b>	1200 (83)
<b>P x T (max.)<sup>2</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 Burn
<b>Bacterial Growth:</b>	Will Not Support
<b>Meets Specification:</b>	ABS (American Bureau of Shipping), FDA (Food and Drug Administration) and USDA (US Department of Agriculture)

### TYPICAL PHYSICAL PROPERTIES\*

<b>ASTM F36</b>	<b>Compressibility, %:</b>	7-12	
<b>ASTM F36</b>	<b>Recovery, %:</b>	40	
<b>ASTM F38</b>	<b>Creep Relaxation, %:</b>	18	
<b>ASTM F152</b>	<b>Tensile, Across Grain, psi (N/mm<sup>2</sup>):</b>	2000 (13.8)	
<b>ASTM D792</b>	<b>Specific Gravity:</b>	2.10	
<b>ASTM D1708</b>	<b>Modulus @ 100% Elongation, psi (N/mm<sup>2</sup>):</b>	1600 (11.0)	
<b>ASTM F433</b>	<b>Thermal Conductivity (K), W/m<sup>2</sup>K (Btu.-in./hr.-ft.<sup>2</sup>.°F):</b>	0.36-0.45 (2.50-3.15)	
<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:	362	-
	96 hours at 100% Relative Humidity	61	-
<b>ASTM F586</b>	<b>Design Factors</b>	<u>1/16" &amp; Under</u>	<u>1/8"</u>
	"m" factor:	5.0	5
	"y" factor, psi (N/mm <sup>2</sup> ):	2750 (19.0)	3500 (24.1)
<b>ROTT</b>	<b>Gasket Constants, 1/16":</b>	Gb=949	a=0.253   Gs=2.6
	1/8":	Gb=1980	a=0.169   Gs=0.393
<b>ASTM F104</b>	<b>Line Call Out:</b>	F451999A9B4E99K6M6 <sup>(3)</sup>	

### SEALING CHARACTERISTICS\*

	<b>ASTM F37B Fuel A</b>	<b>DIN 3535- 4 Gas Permeability</b>
<b>Gasket Load, psi (N/mm<sup>2</sup>):</b>	1000 (7)	4640 (32)
<b>Internal Pressure, psig (bar):</b>	9.8 (0.7)	580 (40)
<b>Leakage</b>	<b>0.22 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 based on 1/32" (0.8mm) sheet thickness unless otherwise mentioned.

\* Values do not constitute specification Limits

<sup>1</sup> See Garlock chemical resistance guide.

<sup>2</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.

<sup>3</sup> 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/mm<sup>2</sup>), 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.