



## Garlock GYLON® 3545

### MATERIAL PROPERTIES\*

<b>Color:</b>	White
<b>Composition:</b>	Microcellular PTFE
<b>Fluid Services<sup>1</sup>:</b>	Strong caustics, strong acids, chlorine, hydrocarbons, cryogenics, plastic piping, glass-lined equipment and low bolt load applications <sup>3</sup>
<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>	FDA (Food and Drug Administration)

### PHYSICAL PROPERTIES\*

<b>ASTM F36</b>	<b>Compressibility, %:</b>	60-70		
<b>ASTM F36</b>	<b>Recovery, %:</b>	15		
<b>ASTM F38</b>	<b>Creep Relaxation, %:</b>	15		
<b>ASTM F152</b>	<b>Tensile, Across Grain, psi (N/mm<sup>2</sup>):</b>	-		
<b>ASTM D149</b>	<b>Dielectric Properties, range, volts/mil.</b>			
	Sample conditioning	1/16"	1/8"	
	3 hours at 250°F:	248	244	
	96 hours at 100% Relative Humidity	222	264	
<b>ASTM F586</b>	<b>Design Factors</b>	1/16"	1/8"	
	"m" factor:	2.6	2.0	
	"y" factor, psi (N/mm <sup>2</sup> ):	1500 (10.3)	2200 (15.2)	
<b>ROTT</b>	<b>Gasket Constants, 1/16":</b>	Gb=162.1	a=0.379	Gs=1.35x10 <sup>-9</sup>
	1/8":	Gb=92.48	a=0.468	Gs=2.50x10 <sup>-3</sup>
	3/16":	Gb=628	a=0.249	Gs=7.93x10 <sup>-5</sup>
<b>ASTM F104</b>	<b>Line Call Out:</b>	F419000A9B3 <sup>(4)</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>0.15 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> For PVC and FRP flanges, a minimum compressive stress of 2400psi (166bar) is recommended on the contacted gasket area for 150psig (10.4bar) liquid service. Consult with the flange manufacturer to confirm that adequate compressive stress is available.

<sup>4</sup> Third numeral 9: F36 Compressibility = 60-70%. A9: Leakage in Fuel A (Isooctane), Gasket Load = 1,000psi (7.0N/mm<sup>2</sup>), Pressure = 9.8psig (0.7bar): Typical = 0.15ml/hr, Max = 1.0ml/hr.