Garlock SEALING TECHNOLOGIES®
an EnPro Industries company

GYLON gen2™

Garlock GYLON® 3591

MATERIAL PROPERTIES*

Color:	Yellow
Composition:	PTFE with barium sulfate
Fluid Services[1]:	Strong caustics, moderate acids, chlorine, gases, water, hydrocarbons steam and cryogenics
Temperature[2], °F (°C)	
Minimum:	-450 (-268)
Continuous Max:	+500 (+260)
Pressure[2], Maximum, psig (bar):	1200 (83)
P x T (max.)[2], psig x °F (bar x °C)	
1/32 and 1/16":	350,000 (12,000)
1/8":	250,000 (8,600)
Flammability:	Will Not Burn
Bacterial Growth:	Will Not Support
Meets Specification:	FDA (Food and Drug Administration)

PHYSICAL PROPERTIES*

ASTM F36	**Compressibility**, %:		15-25	
ASTM F36	**Recovery**, %:		40	
ASTM F38	**Creep Relaxation**, %:		35	
ASTM F152	**Tensile**, Across Grain, psi (N/mm^2):		2000 (13.8)	
ASTM D792	**Specific Gravity**:		2.30	
ASTM D1708	**Modulus @ 100% Elongation**, psi (N/mm^2):		1400 (9.6)	
ASTM D149	**Dielectric Properties**, range, volts/mil.			
	Sample conditioning	1/16"	1/8"	
	None	445	-	
	96 hours at 100% Relative Humidity	-	-	
ASTM F586	**Design Factors**	1/16"	1/8"	
	"m" factor:	4.3	2.0	
	"y" factor, psi (N/mm^2):	1650 (11.4)	1650 (11.4)	
ROTT	**Gasket Constants**, 1/16":	Gb=35	a=0.582	Gs=1.90x10^{-4}
ASTM F104	**Line Call Out**:	F454111A9B9E11M6[(3)]		

SEALING CHARACTERISTICS*

	ASTM F37B Fuel A	ASTM F37B Nitrogen
Gasket Load, psi (N/mm2):	1000 (7)	3000 (20)
Internal Pressure, psig (bar):	9.8 (0.7)	30 (2)
Leakage	**0.2 ml/hr.**	**0.1 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 based on 1/32" (0.8mm) sheet thickness unless otherwise mentioned.

* Values do not constitute specification Limits

[1] See Garlock chemical resistance guide.

[2] 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.

[3] A9: Leakage in Fuel A (Isooctane), Gasket Load = 1,000psi (7.0N/mm^2), Pressure = 9.8psig (0.7bar): Typical = 0.20ml/hr. A9: Leakage in Nitrogen, Gasket Load = 3,000psi (20N/mm2), Pressure = 30psig (2bar): Typical = 0.1ml/hr. B9: Creep Relaxation = 35%.