

an EnPro Industries company





MATERIAL PROPERTIES

Color: White Composition: Microcellular PTFE Fluid Services¹: Strong caustics, strong acids, chlorine, hydrocarbons, cryogenics, glass-lined equipment and low bolt load applications³ Temperature², °F (°C) Minimum: -450 (-268) Continuous Max: +500 (+260) Pressure², 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

ABS (American Bureau of Shipping), FDA (Food and Drug Administration)

TYPICAL PHYSICAL PROPERTIES

Meets Specification:

ASTM F36	Compressibility, %:	60-70	
ASTM F36	Recovery, %:	15	
ASTM F38	Creep Relaxation, %:	15	
ASTM F152	Tensile, Across Grain, psi (N/mm²):	-	
ASTM D149	Dielectric Properties, range, volts/mil.		
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>
	3 hours at 250°F:	248	244
	96 hours at 100% Relative Humidity	222	264
ASTM F586	Design Factors	<u>1/16" & Under</u>	<u>1/8"</u>
	"m" factor:	2.6	2.0
	"y" factor, psi (N/mm²):	1500 (10.3)	2200 (15.2)
ROTT	Gasket Constants, 1/16":	Gb=162.1 a=0.3	379 Gs=1.35x10 ⁻⁹
	1/8":	Gb=92.48 a=0.4	l68 Gs=2.50x10 ⁻³
	3/16":	Gb=628 a=0.2	249 Gs=7.93x10 ⁻⁵
ASTM F104	Line Call Out:	F419000A9B3 ⁽⁴⁾	

SEALING CHARACTERISTICS

	ASTM F37B Fuel A	DIN 3535- 4 Gas Permeability
Gasket Load, psi (N/mm2):	1000 (7)	4640 (32)
Internal Pressure, psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.15 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 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 For flat face flanges, a minimum compressive stress of 1500psi (103N/mm²) 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.

⁴ Third numeral 9: F36 Compressibility = 60-70%. A9: Leakage in Fuel A (Isooctane), Gasket Load = 1,000psi (7.0N/mm2), Pressure = 9.8psig (0.7bar): Typical = 0.15ml/hr, Max = 1.0ml/hr.