

Material Properties*

Color:	White
Composition:	Microcellular PTFE
Fluid Services (See chemical resistance guide):	Strong caustics, strong acids, chlorine, hydrocarbons, cryogenics, glass-lined equipment and low bolt load applications ²
Temperature¹, °F (°C)	
Minimum:	-450 (-268)
Maximum:	+500 (+260)
Ideal Operating Limit:	+400 (+204)
Pressure¹, psig (bar)	
Minimum:	Full Vacuum
Maximum:	1200 (83)
Ideal Operating Limit:	750 (52)
PxT (max.)¹, psig x °F (bar x °C)	
1/32 and 1/16":	350,000 (12,000)
1/8":	250,000 (8,600)
Flammability:	Will Not Support Flame
Bacterial Growth:	Will Not Support
Meets Specifications:	ABS (American Bureau of Shipping), FDA (Food and Drug Administration) 21 CFR 177.1550

Typical Physical Properties*

ASTM F36	Compressibility, average, %:	60-70	
ASTM F36	Recovery, %:	15	
ASTM F38	Creep Relaxation, %:	15	
ASTM D149	Dielectric Properties, range, volts/mil.		
	Sample conditioning	1/16"	1/8"
	3 hours at 250°F	248	244
	96 hours at 100% Relative Humidity:	222	264
ASTM F586	Design Factors	1/16" & Under	1/8"
	"m" factor:	2.6	2.0
	"y" factor, psi (N/mm ²):	1500 (10.3)	2200 (15.2)
ROTT	Gasket Constants		
	1/16":	Gb = 162.1	a = 0.379 Gs = 1.35 x 10 ⁻⁹
	1/8":	Gb = 92.48	a = 0.468 Gs = 2.50 x 10 ⁻³
	3/16":	Gb = 628	a = 0.249 Gs = 7.93 x 10 ⁻⁵

Sealing Characteristics*

	ASTM F37B - Fuel A	DIN 3535 - Nitrogen
Gasket Load <small>psi (N/mm²)</small>	1000 (7)	4640 (32)
Internal Pressure <small>psig (bar)</small>	9.8 (0.7)	580 (40)
Leakage	0.15 ml/hr	<0.015 cc/min

* This is a general guide and should not be sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties

¹ Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult D&D Engineered Products. Minimum temperature rating is conservative.

² For flat face flanges, a minimum compression 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.