

Material Properties*

Color:	Off-White
Composition:	PTFE with barium sulfate and a perforated 316L stainless steel insert
Fluid Services (See chemical resistance guide):	Strong caustics, moderate acids, chlorine, gases, water, steam, cryogenics, hydrocarbons and aluminum fluoride
Temperature¹, °F (°C)	
Minimum:	-150 (-100) ²
Maximum:	+500 (+260)
Ideal Operating Limit:	+400 (+204)
Pressure¹, psig (bar)	
Minimum:	Full Vacuum
Maximum:	2500 (173)
PxT (max.)¹, psig x °F (bar x °C)	
1/32 and 1/16":	700,000 (25,000)
1/8":	450,000 (15,000)
Flammability:	Will Not Support Flame
Bacterial Growth:	Will Not Support
Meets Specifications:	

Typical Physical Properties*

ASTM F36	Compressibility, average, %:	3-7 ⁽³⁾		
ASTM F36	Recovery, %:	50 ⁽³⁾		
ASTM F38	Creep Relaxation, %:	20 ⁽³⁾		
ASTM D1708	Tensile, Across Grain, psi (N/mm²):	5000 (34) ³		
ASTM D792	Specific Gravity:	N/A		
ASTM D1708	Modulus @ 100% Elongation, psi (N/mm²):	N/A		
ASTM F433	Thermal Conductivity (K), W/m²K (Btu. ·in./hr. · ft.². °F)	0.29-0.38 (2.00-2.65)		
ASTM F586	Design Factors	1/16" & Under	1/8"	
	"m" factor:	5.0	5.0	
	"y" factor, psi (N/mm ²):	3500 (24.1)	4000 (27.6)	
ROTT	Gasket Constants:			
	1/16"	Gb = 72.3	a = 0.466	Gs = 2.16x10 ⁻¹
	1/8"	N/A		

Sealing Characteristics*

	ASTM F37B – Fuel A	DIN 3535 – Nitrogen
Gasket Load psi (N/mm ²)	1000 (7)	4640 (32)
Internal Pressure psig (bar)	9.8 (0.7)	580 (40)
Leakage	0.01⁽³⁾ ml/hr	<0.015⁽³⁾ 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 The minimum temperature rating is based on the 316LSS insert material. Many customers successfully use HP GYLON materials in cryogenic services as low as -450°F (-268°C).

³ Test results based on 1/16" thick material