

GYLON® Style 3504

MATERIAL PROPERTIES*:

| | |
|--|---|
| Color: | Blue |
| Composition: | PTFE with Aluminosilicate microspheres |
| Fluid Services (see chemical resistance guide): | Many acids, some caustics, hydrocarbons, solvents, hydrogen peroxide, refrigerants and cryogenics |
| Temperature¹, °F (°C) | |
| Minimum: | -450 (-268) |
| Maximum: | +500 (+260) |
| Pressure¹, Maximum, psig (bar): | 800 (55) |
| P x T (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 and USP (US Pharmacopeia) |

TYPICAL PHYSICAL PROPERTIES*:

| | | | |
|-------------------|--|--------------------------|----------------------------------|
| ASTM F36 | Compressibility, average, %: | 25-45 | |
| ASTM F36 | Recovery, %: | 30 | |
| ASTM F38 | Creep Relaxation, %: | 40.0 | |
| ASTM D1708 | Tensile, Across Grain, psi (N/mm²): | 2000 (13.8) | |
| ASTM D792 | Specific Gravity: | 1.70 | |
| ASTM D1708 | Modulus @ 100% Elongation, psi (N/mm²): | 1500 (10.3) | |
| ASTM F433 | Thermal Conductivity (K), W/m²K (Btu.in./hr.ft.².°F): | 0.14-0.24 (1.00-1.65) | |
| ASTM D149 | Dielectric Properties, range, volts/mil. | | |
| | Sample conditioning | <u>1/16"</u> | <u>1/8"</u> |
| | 3 hours at 250°F | 318 | - |
| | 96 hours at 100% Relative Humidity: | 245 | - |
| ASTM F586 | Design Factors | <u>1/16" & Under</u> | <u>1/8"</u> |
| | "m" factor: | 3.0 | 2.5 |
| | "y" factor, psi (N/mm ²): | 1650 (11.4) | 3000 (20.7) |
| ROTT | Gasket Constants: | | |
| | 1/16" | Gb=183 | a=0.357 Gs=4.01x10 ⁻³ |
| | 1/8" | Gb=1008 | a=0.221 Gs=2.23 |

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 | 0.12 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

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 Garlock Applications Engineering. Minimum temperature rating is conservative.

5/15/2019