

GYLON® Style 3545

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) |
| Pressure¹, Maximum, psig (bar): | 1200 (83) |
| 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 |

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 | <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/mm ²): | 1500 (10.3) | 2200 (15.2) | |
| ROTT | Gasket Constants: | | | |
| | 1/16" | Gb=162.1 | a=0.379 | Gs=1.35x10 ⁻⁹ |
| | 1/8": | Gb=92.48 | a=0.468 | Gs=2.50x10 ⁻³ |
| | 3/16": | Gb=628 | a=0.249 | Gs=7.93x10 ⁻⁵ |

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 | 0.15 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

¹ Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum P x T, consult Garlock Applications Engineering. Minimum temperature rating is conservative.

² 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.

12/1/2016