

L100 MATRIX



Sealing Global - Servicing Local

Description:

L100 is a high performance biaxially orientated PTFE gasket Material with the addition of a High Quality Silica filler system.

Applications:

L100 can be used to seal most chemicals except molten alkali metals, fluorine gas and hydrogen fluoride. Please refer to Matrix chemical resistance data.

L100 is approved for potable water service, complies with requirements of FDA regulations and can be used at all concentrations of Sulfuric Acid.

Approvals:

Complies with the requirements of FDA21 CFR 177.1550, TA-LUFT
Test information is available for: ROTT, BAM (Oxygen approval)

Operating Limitations

Minimum Temperature: -450°F (-268°C)

Maximum Temperature: 500°F (260°C)

Maximum Pressure: 1235 psi (8.5 MPa)

Matrix L100 Thickness Range:

1/32" (0.8mm) to 1/4" (6.4mm)



Typical Physical Properties (ASTM)

| | |
|--------------------------|-------------------|
| F36 Compression | 7% |
| F36 Recovery | 45% |
| F152 Tensile Strength | 2320 psi (16 MPa) |
| F37 Liquid Leakage | <0.3 mL/hr |
| F38 Creep Relaxation | 35% |
| F149 Dielectric Strength | 20 kV/mm |

Typical Physical Properties (Other)

| | |
|-----------------------------------|---------------------------------------|
| Density | 137 lbs/ft ³ (2.2 g/cc) |
| Residual Stress BS7531 @ 175°C | 4496 psi (31 MPa) |
| Gas Leakage (DIN 3535) | <0.01 mg/(s-m) |
| Gas Leakage - BS7531 | <0.005 mL/min |
| ROTT Constant Gb | 172 |
| ROTT Constant a | 0.401 |
| ROTT Constant Gs | 2.76 x 10 ⁻⁶ |
| Tpmax | 2426 |
| m | 4 |
| y | 2175 psi (15 MPa) |

