

Arlon[®] 2400

High-Temperature Thermoplastic Material



Reliability in Harsh Environments

Arlon[®] 2400, an extension of Greene Tweed's Arlon product line, meets the harsh environment requirements necessary for performance in downhole applications. Arlon[®] 2400 provides the same broad chemical resistance of other Arlon[®] materials but with higher temperature capabilities and increased dimensional stability.

Arlon[®] 2400 has the ability to replace metal parts in high-temperature applications due to its excellent strength-to-weight ratio.

Arlon[®] 2400 is compatible with all well fluids and gases including:

- Reservoir fluids with high H₂S
- Stimulation treatment fluids
- Completion fluids
- Xylene
- Toluene
- Amine-based inhibitors

Arlon[®] 2400 enhances the high-temperature capability of the Seal-Connect[®] product line. This high-temperature capability also improves the performance of back-up rings, Vee-rings, contact blocks, bearings, bushings, and other custom geometries.

Features and Benefits

- Advanced high-temperature mechanical properties lead to extended MTBF (mean time between failure)
- Excellent dimensional stability at high temperatures increases reliability in downhole environments
- Excellent chemical resistance in a range of aggressive chemicals for a broader operating envelope

Applications

- MWD/LWD
- Rotary steerables
- Wireline/completion
- Chemical injection
- Downhole safety valves
- Flow control
- Sand control
- Production monitoring
- Artificial lift

Test/Units, psi (bar)	100°F (38°C)	200°F (93°C)	300°F (149°C)	400°F (204°C)	500°F (260°C)	600°F (316°C)
Tensile Strength @ Break	28,000 (1,930)	23,400 (1,613)	16,900 (1,165)	11,600 (800)	9,600 (662)	6,800 (469)
Compressive Stress @ Maximum Load	38,000 (2,620)	30,400 (2,096)	22,600 (1,558)	12,700 (876)	8,600 (593)	4,500 (310)
Shear Axial, Avg. Break Stress	16,200 (1,117)	13,100 (903)	10,500 (724)	7,400 (510)	6,400 (441)	5,800 (400)
Shear Transverse, Avg. Break Stress	12,100 (834)	9,800 (676)	7,700 (531)	4,900 (338)	4,200 (290)	3,500 (241)