DURLON®
SEALING SOLUTIONS

HT1000®

Phlogopite Mica with Silicone Binder
S90, L316, T316

HT1000® is a registered trademark of Triangle Fluid Controls Ltd.



Physical Properties	
Color	Metallic Gold
Fiber System (90% min.)	Phlogopite Mica,
Binder	Silicone
Temp.: Min Max	-55°C (-67°F) 1,000°C (1,832°F)
Pressure, max, psi (bar) Style S90 Styles L316/T316	 80 (5.5) 580 (40)
Density, g/cc (lbs/ft³)	1.7 (106)
Compressibility, % ASTM F36	18-22
Recovery, % ASTM F36J	39-43
Creep Relaxation, % ASTM F38	55
Tensile Strength across grain ASTM F152, MPa (psi)	 29.6 (4,300)
Ignition Loss, % @ 800°C	<4
Nitrogen Sealability, ASTM F2378	8 cc/min
Dielectric Breakdown, kV/mm (V/mil) ASTM D149	 20 (508)

Durlon® HT1000® consists of phlogopite mica paper impregnated with an inorganic binder at less than half the binder amount found in vermiculite-phyllosilicate filled products. This lower binder content allows for superior weight retention, less than 4% weight loss at 800°C (1,472°F), and results in ultimate extreme temperature sealing performance up to 1,000°C (1,832°F). Durlon® HT1000® characteristics allow for it to be used as a sealing material on its own or combined with various carrier media in heat exchangers, exhaust manifolds, and other equipment commonly found in the refinery, power generation, and chemical industries.

Phlogopite mica is a non-toxic naturally occurring hydrated silicate of potassium and magnesium with a lamellar and non-fibrous structure. It is flexible, has a high tensile strength, can withstand substantial mechanical pressure perpendicular to the lamellar plane, is chemically resistant, fireproof, infusible, incombustible, non-flammable, and is a known alternative to asbestos.

INDUSTRY APPLICATIONS:

- General Industry
- Marine
- Mining
- OEM Services
- Petrochemical
- Power Generation
- Refining

Certifications	
Fire Test	API 607, 4th edition with Exxon modifications

Note: ASTM properties are based on 1/16" sheet thickness, except ASTM F38 which is based on 1/32" sheet thickness. This is a general guide only and should not be the sole means of accepting or rejecting this material. The data listed here falls within the normal range of product properties, but should not be used to establish specifications limits nor used alone as the basis of design. For applications above Class 300, contact our technical department. **Warning:** Durlon® gasket materials should never be recommended when both temperature and pressure are at the maximum listed. Properties and applications stated are typical. No applications should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious injury. Data reported is a compilation of field testing, field service reports and/or in-house testing. While the utmost care has gone into publishing the information contained herein, we assume no responsibility for errors. Specifications and information contained within are subject to change without notice. This edition cancels and obsoletes all previous editions.



S90

Phlogopite mica paper impregnated with an inorganic binder and no carrier.



L316

Phlogopite mica paper impregnated with an inorganic binder laminated with a 0.002" thick 316 stainless steel carrier.



T316

Phlogopite mica paper impregnated with an inorganic binder laminated with a 0.004" thick 316 stainless steel perforated carrier.