



# DURLON® HT1000®

## Phlogopite Mica with Silicone Binder S90, L316, T316

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

Durlon® HT1000® consists of phlogopite mica paper impregnated with an inorganic binder at less than half the binder amount found in vermiculite-phyllsilicate 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
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Durlon® HT1000® sheets and cut gaskets are available in 3 sheet forms:

**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.



S90



L316



T316

Physical Properties	
Color	Metallic Green-Gold
Material	Phlogopite Mica, 90% min.
Binder	Silicone
Temperature:	
Min	-55°C (-67°F)
Max	1,000°C (1,832°F)
Pressure, Max, bar (psi)	
Style S90	5 (73)
Styles L316/T316	40 (580)
Density, g/cc (lbs/ft³)	1.9 (119)
Compressibility, % ASTM F36J	18-25
Recovery, % ASTM F36J	39-43
Creep Strength, MPa (psi) DIN 52913	40 (5,800)
Tensile Strength, MPa (psi) ISO 178	20 (2,900)
Weight Loss @ 800°C, % DIN 52911	≤5
Thermal Conductivity, W/(m.K) DIN 52612	
@200°C	~0.20
@400°C	~0.35
@600°C	~0.60
Dielectric Strength @ 20°C, kV/mm (V/mil) IEC 60243	~20 (508)

\* The above table refers to Style S90 properties unless otherwise specified.

**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.