

# GTB Flexible Graphite

Technical Data Sheet 436

**Product Family -** Single Layer Materials - Inhibited (Service to 525°C)

- GTJ Nuclear 99.8% Graphite, D50YP12 or SHELL MESC SPE 85/203
- GTB 98% Graphite, FSA G-604-07 Method A
- SUPER GTO™ 97% Graphite, FSA G-604-07 Method A

#### **Product Overview**

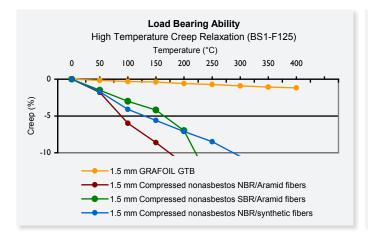
GRAFOIL® GTB flexible graphite is inhibited against oxidation and corrosion for use in most industrial fluid sealing applications.

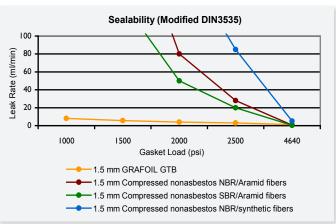
#### **Applications**

Most standard industrial fluid sealing applications, including:

- Chemical
- Petrochemical







While maintaining an effective seal, GRAFOIL® material exhibits virtually no creep relaxation. As a result, the need for periodic bolt tightening is greatly reduced.

### Typical Properties\*

Characteristic	Typical Value
Thickness	0.005" (0.13 mm) 0.010" (0.25 mm) 0.015" (0.38 mm) 0.020" (0.51 mm) 0.025" (0.64 mm) 0.030" (0.76 mm) 0.040" (1.02 mm) 0.060" (1.52 mm)
Width	24" (610 mm) 39.4" (1000 mm) - Not 0.005"
Length	100' (30.5 m)
Bulk Density	70 lb/ft³ (1.12 g/cc) 62.4 lb/ft3 (1.00 g/cc)
Ash Content	1.8%
Carbon Content	98.2%
Leachable Chloride	10 ppm
Sulfur Content	550 ppm
Oxidation Weight Loss	3%
Compressibility at 5000 psi (35 MPa) load	43% for 70 lb/ft <sup>3</sup>
Recovery after 5000 psi (35 MPa) load	15% for 70 lb/ft³
Tensile Strength	650 psi for 70 lb/ft³
Temperature Use Range	-400°F to 975°F (-240°C to 525°C)
Creep Relaxation Method: BSI-F125 at 6391 psi (44.1 MPa) load up to 400°C	<3% for 70 lb/ft <sup>3</sup>
Sealability Method: Mod DIN 3535 at 580 psi N² at 32 MPa load	<1.5 ml/min for 70 lb/ft³
Certification	Certify to Grade
after 5000 psi (35 MPa) load  Tensile Strength  Temperature Use Range  Creep Relaxation Method: BSI-F125 at 6391 psi (44.1 MPa) load up to 400°C  Sealability Method: Mod DIN 3535 at 580 psi N² at 32 MPa load	650 psi for 70 lb/ft³  -400°F to 975°F (-240°C to 525°C)  <3% for 70 lb/ft³  <1.5 ml/min for 70 lb/ft³

- +1 (800) 253-8003 (Toll-Free in USA) +1 (216) 529-3777 (International)

## **Redefining limits**

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Notes:
\* Properties listed are typical and cannot be used as accept/reject specifications.