

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

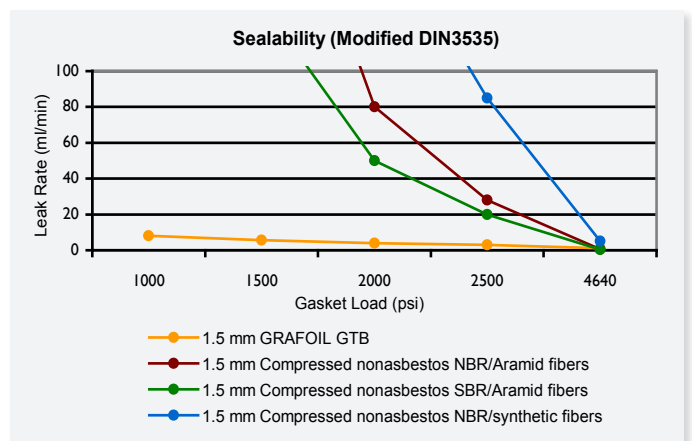
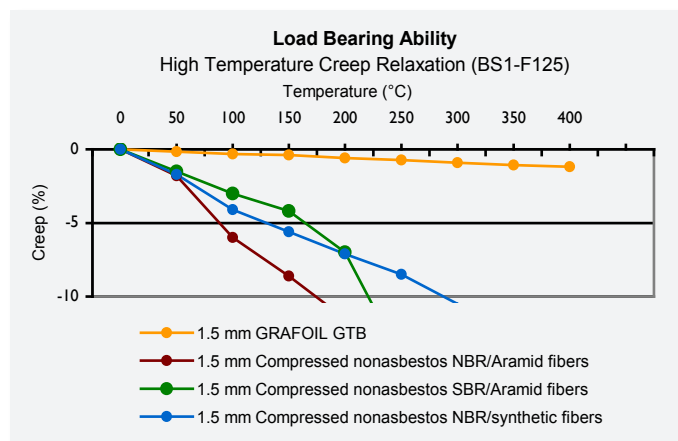
Product Overview

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/ft ³ (1.12 g/cc) 62.4 lb/ft ³ (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 ³
Recovery after 5000 psi (35 MPa) load	15% for 70 lb/ft ³
Tensile Strength	650 psi for 70 lb/ft ³
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 ³
Sealability Method: Mod DIN 3535 at 580 psi N ² at 32 MPa load	<1.5 ml/min for 70 lb/ft ³
Certification	Certify to Grade

Notes:

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

+1 (800) 253-8003 (Toll-Free in USA)

+1 (216) 529-3777 (International)

www.graftechAET.com | info@graftechAET.com

© 2017 Advanced Energy Technologies LLC. This information is based on data believed to be reliable but AET makes no warranties, express or implied, as to its accuracy and assumes no liability arising out of its use. The data listed falls within the normal range of product properties but should not be used to establish specification limits or used alone as the basis of design. AET's liability to purchasers is expressly limited to the terms and conditions of sale. eGRAF, GRAFGUARD® and GRAFOIL® are registered trademarks of Advanced Energy Technologies LLC. eGRAF, GRAFGUARD® and GRAFOIL® products, materials, and processes are covered by several US patents. For patent information visit www.graftechAET.com.

4.19.2017