GRAFOIL® SEALING SOLUTIONS

standard fluid sealing

Grade GTB

TECHNICAL BULLETIN 436

SINGLE LAYER MATERIAL

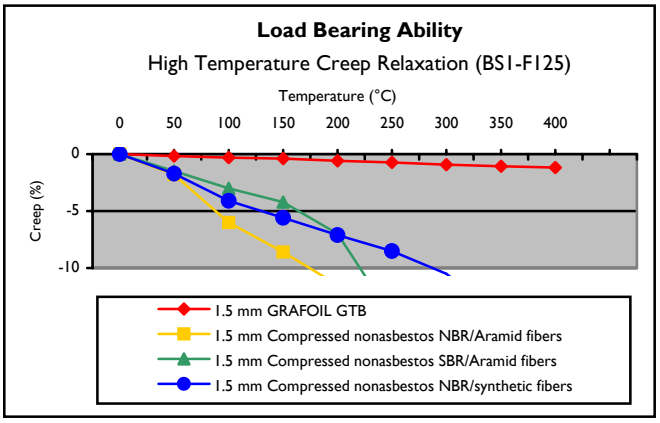
STANDARD GRADES

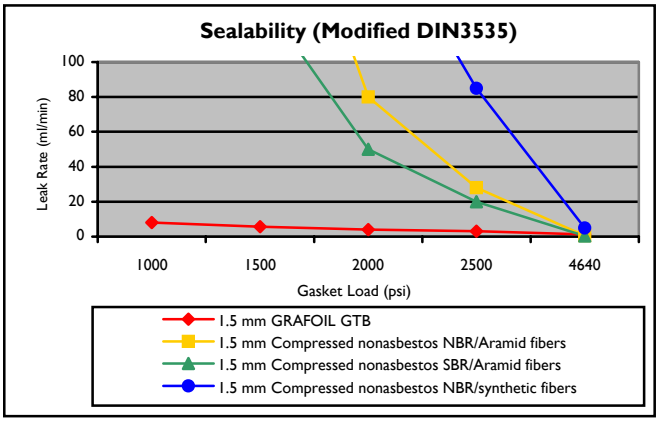
GTA	Non-inhibited, Nuclear 99.8% graphite
GTJ	Inhibited, Nuclear 99.8% graphite
GTB	Inhibited 98% graphite
GTD	SWG filler material 98.5% graphite
GTX	Highly inhibited

GRAFOIL Grade GTB

GRAFOIL GTB flexible graphite sheet is a gasketing material containing no binders or fillers. Standard industrial grade GTB flexible graphite has an oxidation / corrosion inhibitor and is typically 98% graphite. Grade GTB is the facing material for grades GHR, GHE, GHP and GHW laminates.

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





APPLICATIONS

Most standard industrial fluid sealing applications, including:

- Chemical
- Petrochemical
- Refinery
- Steam service

or additional information, contact the GrafTech Sales Office: +1 (800) 253-8003 (Toll-Free in USA), +1 (216) 529-3777 (International), +1 (216) 529-3922 (Fax)

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GRAFTech International

GRAFOIL®
SEALING SOLUTIONS

standard fluid sealing

Grade GTB

Grade GTB Typical Properties[1]

CHARACTERISTIC	TYPICAL PROPERTY
Thickness	0.005" (0.13 mm) Standard 0.010" (0.25 mm) Standard 0.015" (0.38 mm) Standard 0.020" (0.51 mm) Standard 0.025" (0.64 mm) Standard 0.030" (0.76 mm) Standard 0.040" (1.02 mm) Standard 0.060" (1.52 mm) Standard *Non-standard thicknesses may be available upon request.*
Width	24" (610 mm) Standard for 0.005", 0.010", 0.015", 0.020", 0.025", 0.030", 0.060" thick 39.4" (1000 mm) Standard for 0.010", 0.015", 0.020", 0.025", 0.030", 0.040", 0.060" thick *Non-standard widths may be available upon request.*
Length	100' (30.5 m) Standard *Non-standard lengths may be available upon request.*
Bulk Density	70 lb/ft^3 (1.12 g/cc) Standard for 0.005", 0.010", 0.015", 0.020", 0.025", 0.030", 0.060" thick 62.4 lb/ft^3 (1.00 g/cc) Standard for 0.020", 0.040", 0.060" thick *Non-standard densities may be available upon request.*
Ash Content	1.8% Typical
Carbon Content	98.2% Typical
Leachable Chloride	10 ppm Typical
Sulfur Content	550 ppm Typical
Oxidation Weight Loss	3% Typical
Compressibility at 5000 psi (35 MPa) load	43% Typical for 70 lb/ft^3
Recovery after 5000 psi (35 MPa) load	15% Typical for 70 lb/ft^3
Tensile Strength	650 psi Typical 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% Typical for 70 lb/ft^3
Sealability Method: Mod DIN 3535 at 580 psi N_2 at 32 MPa load	<1.5 ml/min Typical for 70 lb/ft^3
Certification	Certify to Grade

[1]Properties listed are typical and cannot be used as accept/reject specifications. Specifications are listed under Technical Bulletin 103.

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