

GTX Flexible Graphite

TECHNICAL DATA SHEET 432

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

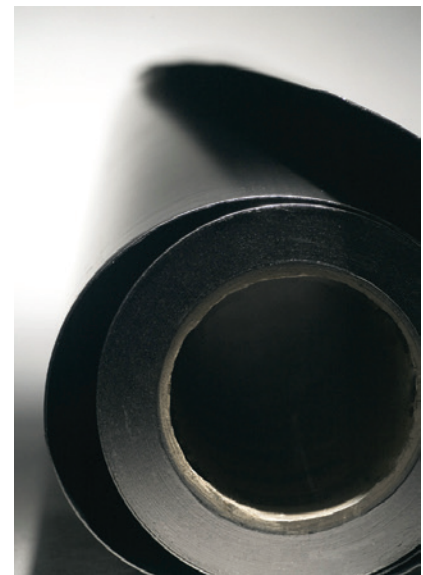
- GTJ - Nuclear 99.8% Graphite, D50YP12 or SHELL MESC SPE 85/203
- GTX - 98% Graphite, SHELL MESC SPE 85/203
- GTB - 98% Graphite, FSA G-604-07 Method A
- SUPER GTO™ - 97% Graphite, FSA G-604-07 Method A

Product Overview

GRAFOIL® GTX flexible graphite meets the requirements of the SHELL specification MESC SPE 85/203 and has a service temperature of 538°C (1000°F). Meets PVRC-SRC flexible graphite specification and is rated as FG600 material.

Applications

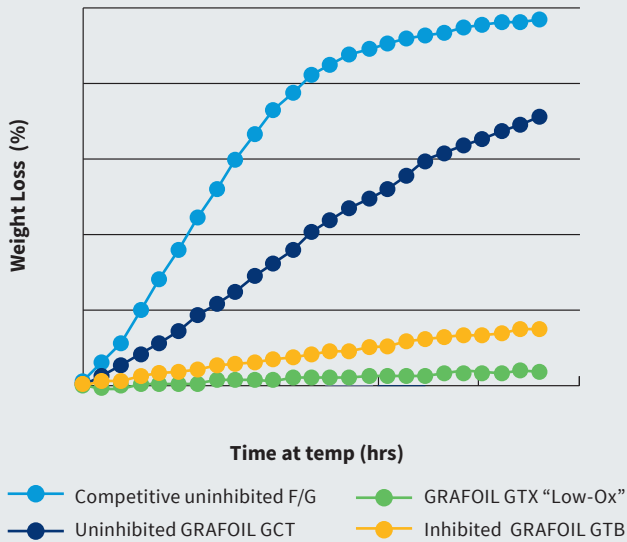
- Heat exchanger gaskets
- Diesel exhaust gaskets
- Internal combustion gaskets
- Turbo charger gaskets



Typical Properties*

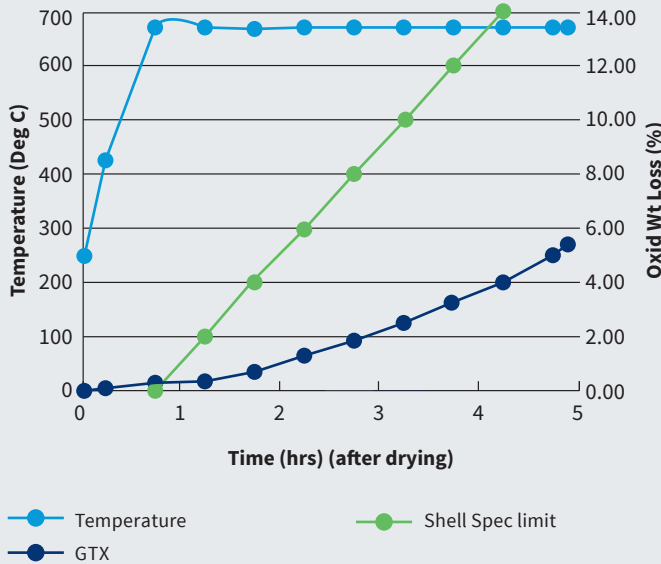
CHARACTERISTIC	TYPICAL VALUE	CHARACTERISTIC	TYPICAL VALUE
Thickness	0.015" (0.38 mm)	Recovery after 5000 psi (35 MPa) load	15% for 70 lb/ft ³
	0.020" (0.51 mm)	Tensile Strength	650 psi for 70 lb/ft ³
	0.030" (0.76 mm)		
Width	39.4" (1000 mm)	Creep Relaxation	
Length	100' (30.5 m)	Method: BSI-F125 at 6391 psi (44.1 MPa)	<3% for 70 lb/ft ³
		load up to 400°C	
Bulk Density	70 lb/ft ³ (1.12 g/cc)	Sealability	
Ash Content**	1%	Method: Mod DIN 3535 at 580 psi N2 at 32 MPa load	<1.5 ml/min for 70 lb/ft ³
Leachable Chloride	<10 ppm	Certification	Certify to Grade
Sulfur Content	750 ppm	Notes:	
Oxidation Weight Loss (593°C for 24 hours)	5%	* Properties listed are typical and cannot be used as accept/reject specifications.	
		** Ash content is corrected for oxidation inhibitor addition.	
Compressibility at 5000 psi (35 MPa) load	43% for 70 lb/ft ³		

**GRAFOIL GRADE GTX MATERIAL
OXIDATION PERFORMANCE**
TGA Oxidation at 593°C for 24 hours



- Continuous use temperature 1000°F(538°C) in oxidizing environments
- Compared to only 975°F (525°C) for standard GRAFOIL grade GTB
- Meets use temperature & oxidation weight loss limits of proposed CAPI specifications for F/G

GRAFOIL GTX OXID. WT. LOSS 4 HRS AT 670°C
per SHELL MESC SPE 85/203



- Meets SHELL flexible graphite material specification MESC SPE 85/203 dtd May 2010
- Shell Specification Oxidation Weight Loss Limit = 16%

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