

GTX Oxidation-Resistant Material

Technical Data Sheet 432

Product Overview

GRAFOIL grade GTX is a highly oxidation-resistant material, which contains an inorganic, passive oxidation and corrosion inhibitor. GTX products are super inhibited for the highest temperature applications, anywhere a good seal is important or galvanic corrosion is an issue including: heat exchanger, internal combustion, diesel exhaust and turbo charger gaskets.

Applications

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

Markets

- Industrial fluid sealing
- Automotive and internal combustion

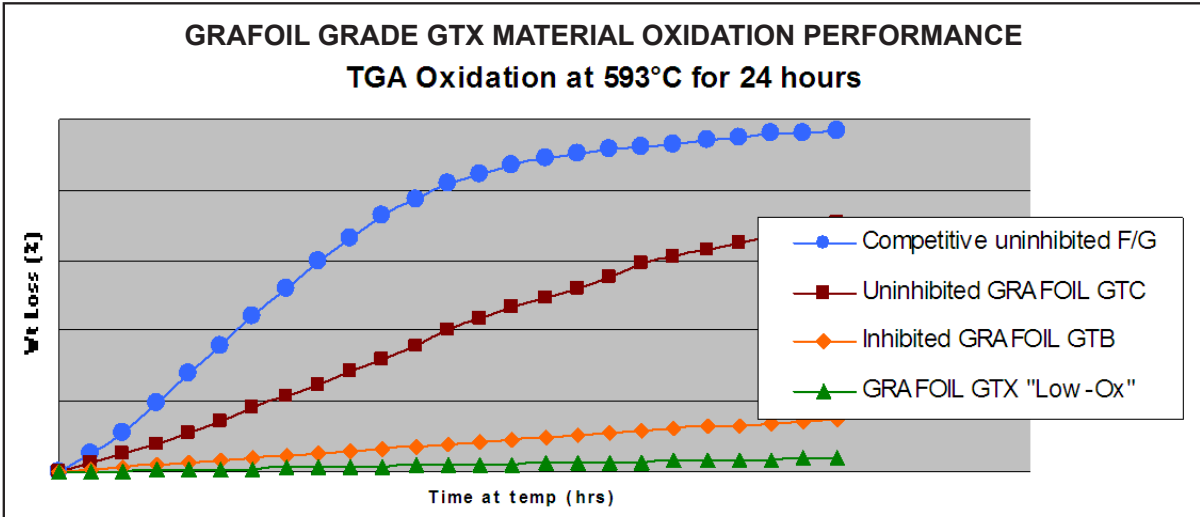
Typical Properties*

Characteristic	Typical Values
Thickness	0.015" (0.38 mm) 0.020" (0.51 mm) 0.030" (0.76 mm) 0.040" (1.02 mm)
Width	39.4" (1000 mm)
Length	100' (30.5 m)
Bulk Density	70 lb/ft ³ (1.12 g/cc)
Ash Content**	1%
Oxidation Inhibitor**	0.3%
Leachable Chloride	<10 ppm
Sulfur Content	550 ppm
Oxidation Weight Loss (593°C for 24 hours)	7%
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
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

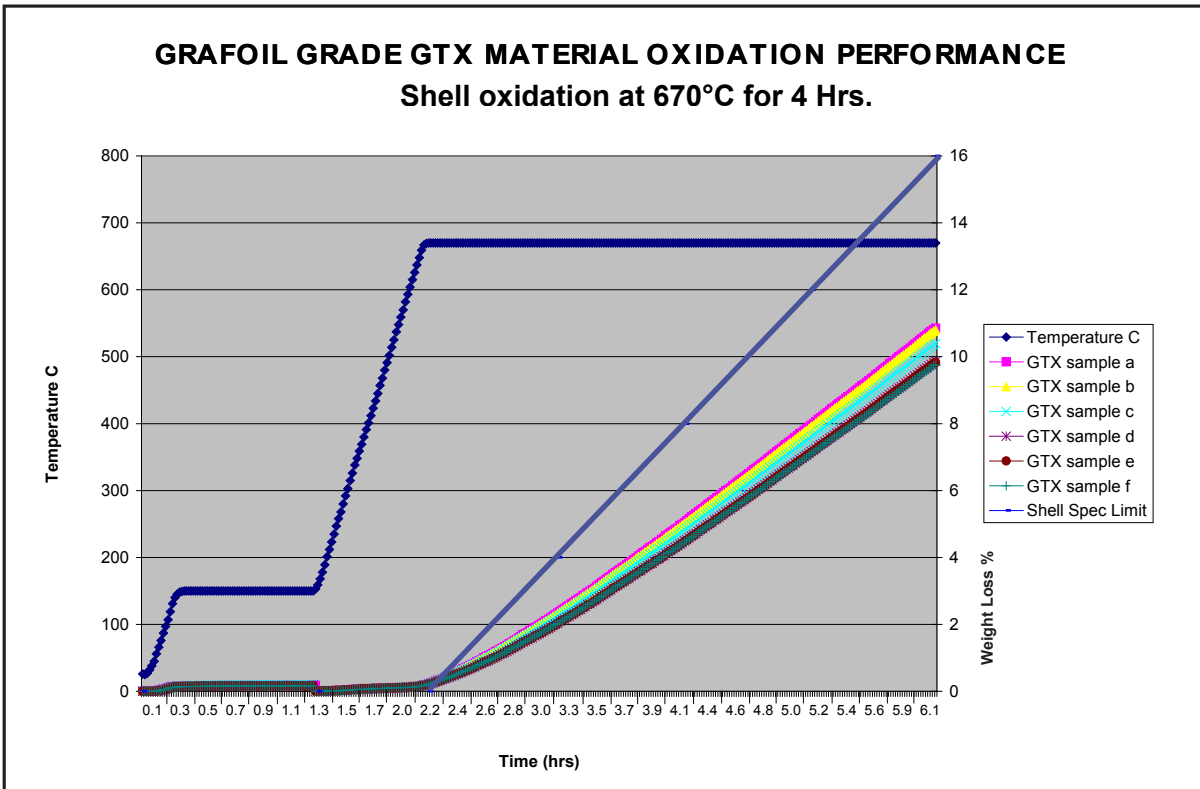
Notes:

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

** Traditional ash testing of the finished sheet materials results in residual amounts of both unintentionally added materials and intentionally added oxidation inhibitors, thus distorting the apparent purity. Testing the flake before the addition of oxidation inhibitors gives a truer picture of the flexible graphite purity.



- 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



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

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

Redefining limits

www.graftech.com | www.grafoil.com
grafoil@graftech.com

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