

GTA Flexible Graphite

Technical Data Sheet 435

Product Family - Single Layer Material (Service to 450°C)

- TG-411 - 99.998% Graphite
- GTA - Nuclear 99.8% Graphite
- TG-312 - 99.8% Graphite
- GTE - 98% Graphite
- GTC - 97% Graphite
- TG-337 - 97% Graphite

Product Overview

GRAFOIL[®] GTA flexible graphite is nuclear-certified and high-purity for use in nuclear applications. It is certified to meet the General Electric Nuclear Nonmetallic Material Specification D50YP12 (Rev 2).



Applications

- Nuclear
- Semiconductor

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)
Width	24" (610 mm) 39.4" (1000 mm) for > 0.015"
Length	100' (30.5 m)
Bulk Density	70 lb/ft ³ (1.12 g/cc)
Ash Content	0.2%
Carbon Content	99.8%

(Typical Properties continued on next page)

Typical Properties* (cont)

Characteristic	Typical Value
Leachable Chloride	<10 ppm
Sulfur Content	450 ppm
Total Chlorides	<50 ppm
Total Fluorides	<10 ppm
Total Halogens	40 ppm
Total Nitrates	10 ppm
Total Nitrites	1 ppm
Mercury (Hg)	<0.5 ppm
Phosphorus	30 ppm
Aluminum (Al)	15 ppm
Copper (Cu)	<10 ppm
Temperature Use Range (in air) Temperature Use Range (in vacuum or reducing environments)	-400°F to 850°F and (-240°C to 450°C). -400°F to 5400°F (-240°C to 3000°C)
Certification	Certify to Grade

Notes:

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

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