

GHL-A & GHC Flexible Graphite Laminate

TECHNICAL DATA SHEET 466

Product Family - Laminates (Multi-Layer Graphite)

- GHL-A, GHC - Adhesively Bonded (GTA, GTC)
- GHA, GHA-C - Cured for Low Outgassing (GTA, GTC)
- GHL-J, GHL - Adhesively Bonded, Inhibited (GTJ, GTB)
- GHA-J, GHB - Cured for Low Outgassing (GTJ, GTB)

Product Overview

GRAFOIL® GHL-A flexible graphite laminate consists of multiple layers of GRAFOIL® GTA flexible graphite. GRAFOIL® GHC flexible graphite laminate consists of multiple layers of GRAFOIL® GTC flexible graphite.

GHL-A Laminate Construction

- 1) GRAFOIL® GTA flexible graphite (per Technical Data Sheet 435)
- 2) Micro-thin, phenolic-based adhesive
- 3) GRAFOIL® GTA flexible graphite (per Technical Data Sheet 435)

GHC Laminate Construction

- 1) GRAFOIL® GTC flexible graphite (per Technical Data Sheet 002)
- 2) Micro-thin, phenolic-based adhesive
- 3) GRAFOIL® GTC flexible graphite (per Technical Data Sheet 002)

Typical Properties*

CHARACTERISTIC	GHL-A TYPICAL VALUE	GHC TYPICAL VALUE
Thickness	0.060" (1.52 mm)	0.060" (1.52 mm)
	0.080" (2.03 mm)	0.080" (2.03 mm)
	0.120" (3.05 mm)	0.120" (3.05 mm)
Width	39.4" (1000 mm)	39.4" (1000 mm)
Length	39.4" (1000 mm)	39.4" (1000 mm)
	100' (30.5 m) for 0.060 thick	100' (30.5 m) for 0.060 thick
Bulk Density	70 lb/ft ³ (1.12 g/cc)	70 lb/ft ³ (1.12 g/cc)
Ash Content	0.2%	3%
Carbon Content	99.8%	97%
Moisture	0.1%	0.1%
Leachable Chloride	< 10 ppm	< 10 ppm
Oxidation Weight Loss After 1 hour at 670°C	12%	12%
Compressibility at 5000 psi (35 MPa) load	43%	43%
Recovery after 5000 psi (35 MPa) load	13%	13%
Tensile Strength	800 psi	650 psi

GRAFOIL® GHL-A & GHC FLEXIBLE GRAPHITE LAMINATE

CHARACTERISTIC	GHL-A TYPICAL VALUE	GHC TYPICAL VALUE
Temperature Use Range	-400°F (-240°C) to 850°F (450°C)	-400°F (-240°C) to 850°F (450°C)
Creep Relaxation at 3000 psi (20 MPa) load for 22 hours at 100°C	< 3%	< 3%
Sealability ASTM F2387 580 psi N2 at 32 MPa load	1.5 ml/min	1.5 ml/min
Certification	Certify to Grade	Certify to Grade

Notes:

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

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