

CeraMaterials™

Graphite & Ceramic Insulation, CFC, Moly & Alumina

GFE-1 – Graphite Felt Electrode PAN Graphite Felt

- GFE-1 is an ultra-high quality PAN-based graphite felt with specialized fibers and weave that has been treated to achieve high liquid wetting and absorption.
- This material was specially developed for the demanding needs of flow battery applications. Our proprietary activation process increases active sites and surface area to over 1000+ M²/g.
- The felt weave results in a smoother surface and a more homogeneous structure for more stable and consistent electrical performance.
- GFE-1 is currently a custom run product and can be optimized for the application.

Application

- Redox Flow Battery (RFB) Electrodes
- Fuel Cells
- Hybrid Flow Battery Electrodes
- Sensors



Physical properties

Typical Value		GFE-1	
Technical data	Unit	Index	Note
Thickness	mm	1-15	Made to Order
Thickness Tolerance	mm	±0.35	MAX
Width	m	1.25-1.6	Made to Order
Length	m	60-120	Made to Order
Density	g/cc	0.09-0.15	+/- 0.005
Electrical Resistance	Ω-cm	0.275	MAX
Carbon Content	%	99.8	MIN
Vanadium Liquid (2 mol/L) Adsorption	g/g	17	MIN
Dropping Crumbs	%	0.168	MAX