

# GORE™ EXCELLERATOR®

## ELECTRODES & ELECTRODE ASSEMBLIES

GREATER PERFORMANCE. GREATER UNDERSTANDING.



### High Performance and Long Life

For electric double layer capacitors (EDLCs) requiring repeated charge and discharge cycles at high power ratings, GORE™ EXCELLERATOR® electrode and electrode assemblies ensure stable performance every time. Featuring nano-fibril PTFE binder, GORE products have high carbon loading ( $\geq 90\%$ ). They are available with a very thin active layer for the greatest conductivity and device power available, or in thicker structures for maximum energy density.

### Easy To Handle

Uniform thickness and a smooth, clean, low-shedding surface make GORE™ EXCELLERATOR® electrodes easy to handle. Our standard products are available in lengthy rolls, and come in an extensive array of standard thicknesses, densities and shapes - including flat sheet and sheet bonded to current collector assemblies.

### Meeting Your Manufacturing Needs

With strong yet flexible electrode and tightly engineered tolerances, GORE™ EXCELLERATOR® electrodes are made

for high-speed, automated manufacturing. This means you will benefit from reduced scrap and tighter control over manufacturing costs. You can simplify your manufacturing processes, too, by requesting our single- or double-sided electrode assemblies. Our proprietary lamination process ensures a stable steadfast bond between current collector and electrode, for trouble-free operation with high-speed winders.

### Experience You Can Count On

Over 20 years ago, GORE pioneered the development of mass-produced electrodes for EDLCs. Today, we are the world's leading supplier of electrodes and foil-based assemblies for EDLCs, and are active in many of the world's most innovative technology development programs. Our ongoing dedication to R&D continually manifests in ever-improving cost and performance positions. The value our products deliver to you is realized time and again, throughout your product development and manufacturing processes.

## FOR ALL EDLC ARCHITECTURES

### Features

- Durable nano-fibril PTFE binder
- High carbon loading
- Very thin to very thick active layer available
- Strong, flexible active layer
- Low electrical resistance
- Tight tolerances
- Dimensionally stable
- Low shedding

### Benefits

- Longer cell life
- Higher energy density
- Higher power density
- Reliable, stable performance
- Easy to handle
- Simplifies manufacturing
- Enables higher throughput
- Helps control costs

### Available Forms

For coin cells, small cells, large cans

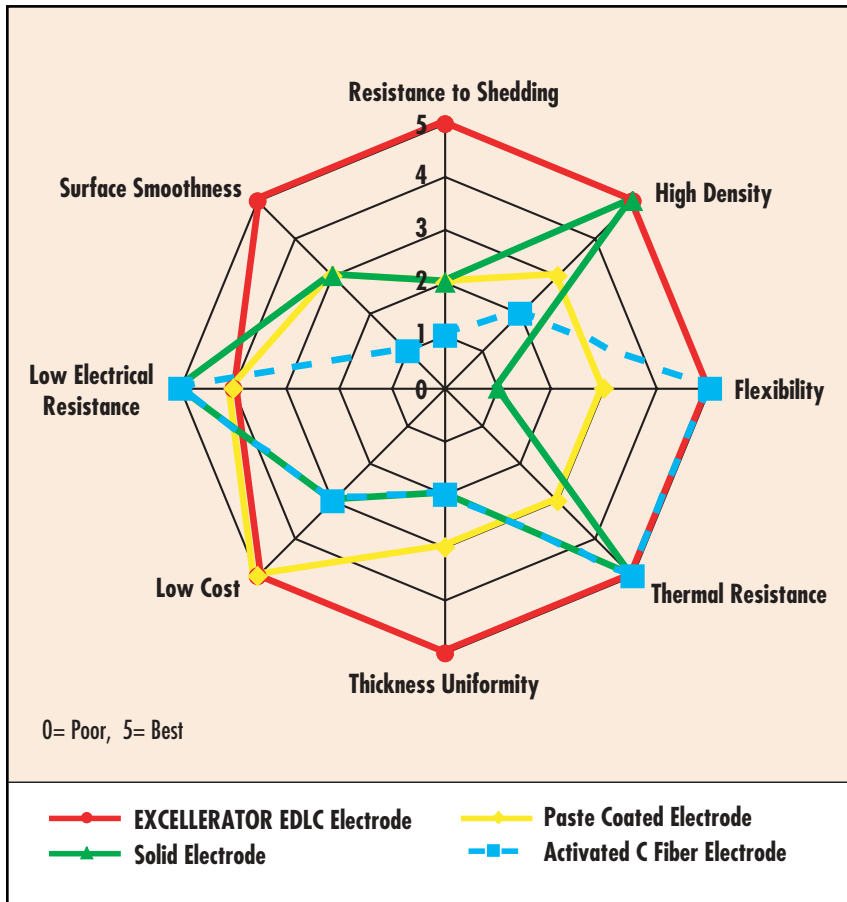
- Sheet
- Sheet bonded to Al current collector
  - Single-sided assemblies
  - Double-sided assemblies



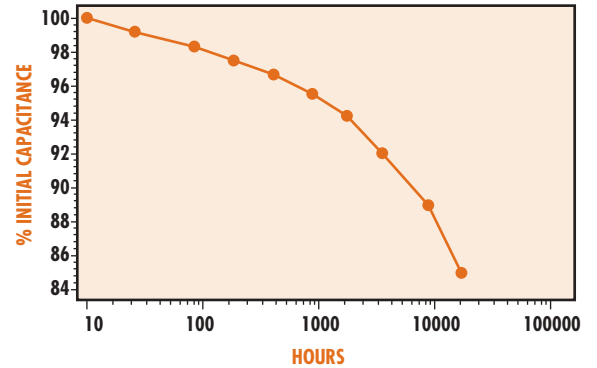
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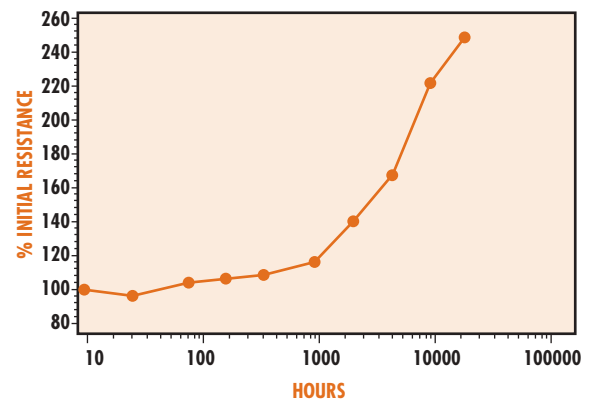
## GORE™ EXCELLERATOR® ELECTRODE FEATURES COMPARED TO COMPETITIVE ELECTRODE TECHNOLOGIES



## CONSISTENTLY HIGH PERFORMANCE OVER LONGER LIFETIMES



The charts above and below demonstrate typical in-cell performance under stressful conditions (65°C at 2.3 volts)



## GORE TECHNOLOGIES FOR ELECTROCHEMISTRY

- Battery Electrodes
- EDLC Electrodes
- Electrode Assemblies
- Gas Diffusion Membranes
- Separators for Acidic Electrolytes
- Separators for Organic Electrolytes
- Vents for Battery Packs
- MEAs for PEM Fuel Cells



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[www.gore.com/excellerator](http://www.gore.com/excellerator)

The optimal performance of any Gore product is dependent upon how it is incorporated into the final device. Please contact one of our technical sales associates for application assistance.

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