



Products: *PFSA Membranes (Nafion-Like)*

Company name: *Electrochemia Co.*

Introduction: *Electrochemia* is the manufacturer of perfluorinated sulfonic acid (PFSA) membranes. Our products as cation exchange membranes satisfy requirements of a broad range of high-tech applications technically and economically. High quality and low cost PFSA membranes, somewhat similar to commercial *Nafion* membranes with ~1080 equivalent weight at different thicknesses are manufactured.

Applications in Energy Sector

- (PEM) Fuel cells as horse powers for electric cars and/or hybrid vehicles, stationary (buildings) and mobile (cell phone and laptop) applications
- Rechargeable batteries, e.g. Sodium sulfur, Lithium ion-polymer, Vanadium redox flow and Zinc-air batteries, etc.
- New polymeric solar cells
- Super capacitors
- Water electrolysis for H₂ production
- Electrochemical synthesis
- Sensors and actuators (IPMC),
- Research and development (R&D)

Applications in Chemical Processing

- Chlor-alkali by membrane cell
- HCl electrolysis in PVC and Isocyanides productions
- High purity chemicals for semiconductor industries
- Humidifiers
- Super acid catalyst
- Industrial membrane repair, etc.

