

Product Description

Electrospun PAN is an ultrafine mat of polyacrylonitrile produced by electrospinning. This product is a free standing flexible sheet with microstructural features not available from a bulk material. The fine scale of fiber diameters produces a membrane material with an inherently high surface area to volume ratio. The interconnected irregular shape pores within the fibers largely increases the pore volume (porosity) and accessible surface area. The membrane has a typical thickness of 1 mil (25 microns) and the thickness can easily be adjusted as per customer's specifications. The diameter of the nanofiber can also be adjusted. Electrospun PAN finds various applications such as waste water treatment, nanofiber separator membrane for lithium ion batteries, and precursors for the production of high surface area carbon nanofibers (CNFs) which can be used for electrode materials for flexible lithium ion batteries, catalyst support for fuel cells, etc.

Typical Properties

Color: White

Size: 11 x 8"

Typical Thickness: 1 mil (25 microns)

Typical Fiber Diameter: 50 – 300 nm

Areal Density: $1 \times 10^{-3} \text{ g/cm}^2$

