

# CIRCUITEX FOAM AND ADDITIVE PRODUCT PORTFOLIO BY NOBLE BIOMATERIALS

ADVANCED MATERIAL FOR MULTISPECTRAL ENERGY MANAGEMENT



Circuitex technology is a portfolio of highly conductive, lightweight textiles engineered for multispectral energy management. Circuitex can move electrical energy and data through soft surface materials without the assistance of wires. Circuitex products are also designed to shield the full spectrum of electromagnetic energy waves for mission critical protection and security.



## STAPLE FIBER

Circuitex staple filaments are spun into a wide variety of component fibers to create yarns offering technical properties suitable for antistatic, conductive, and thermal applications. These components can include but are not limited to polyester, polypropylene, nylon, and cotton.



## CHOPPED STAPLE

Circuitex chopped staple filaments are short-length conductive fibers that can be spun with a wide variety of component yarns to create technical properties suitable for ESD antistatic, conductive, and thermal applications. This product line can be used as an additive to materials to promote conductivity in the Z-axis by suspension in elastomers, adhesives, and polymers. Advantages over traditional additives include high conductivity and lighter weight to promote dispersion.



## FINE CHOPPED STAPLE

Circuitex fine chopped staple filaments offer similar benefits to chopped staple with shorter fibers down to .02" in length to allow for denser dispersion.

## FOAM SHEETS

Circuitex conductive foam provides the most comprehensive multispectral shielding properties in the marketplace. Because of its composition and superior surface area, the product line acts as a conductive plane and provides absorptive wave properties. This product line also offers exceptional thermal conductivity properties.



## FOAM AND ADDITIVE APPLICATION



### ANTI-STATIC / ESD

Curtains, Barriers, Wall Sections, Wallpaper, Floor Mats, FIBC Bags, Courier Bags, Brushes, Paints, Adhesives, Coatings

