## CIRCUITEX FIBER AND YARN 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.



#### FILAMENT

Circuitex filament yarns are available as multifilament and monofilament products with varying levels of twist. These products are easily integrated into traditional textile manufacturing equipment and are suitable for many antistatic, conductive, and thermal applications.

# FILAMENT YARNS (TWISTED/PLIED)

Circuitex filament yarns can be twisted or plied to create a wide offering of technical products suitable for antistatic, conductive, and thermal applications. The combination of filament and twist levels create a wide product range of conductive properties that allow flexibility when designing end use products.

# FILAMENT COMBINATION YARNS

Circuitex filament yarns can be twisted or plied with component yarns to create a wide offering of technical products suitable for antistatic, conductive, and thermal applications. These components can include polyester, polypropylene, nylon, acrylic, and cotton.

#### **SPUN YARNS**

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.







### FIBER AND YARN APPLICATION



#### ANTI-STATIC / ESD

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









#### EMI / RFI

Curtains, Gaskets, Filters, Cables, O-Rings, Vent Panels, Optical Filters, Tapes, Foam, Board Shields, Microwave Absorbers











#### **SMART / E-TEXTILES**

Pressure-Sensing • Biometric • Conductive • Energy-Harnessing: Apparel/Footwear/Products/Devices/Fabric

