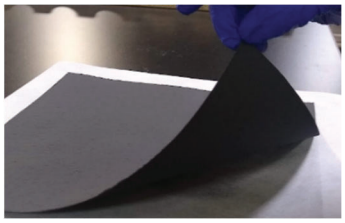
BUCKYPAPER (MF-SERIES)



TECHNICAL DATA SHEET

A synergisitic blend of multi-walled carbon nanotubes that have been formed in a porous sheet—a buckypaper—to be used as an electrode, membrane, or "prepreg". It contains no binder, possesses high porosity, good electrical and thermal properties. It is designed for seamless integration with various composite systems, delivering unparalleled performance in a wide range of applications.

APPLICATIONS

- Automotive parts requiring conductive & thermal management materials for advanced vehicle systems
- Electronic applications needing EMI/RFI shielding, thermal interface materials, and conductive pathways
- Energy Storage Devices including battery electrodes and supercapacitors for efficient energy storage
- Conductive membranes and biosensors for advanced healthcare solutions
- High-efficiency filtration membranes for water purification and gas separation
- Corrosion-resistant composites where corrosion of metals is problematic, providing durable and long-lasting alternatives in harsh environments

FEATURES & BENEFITS

- **High Porosity:** High porosity facilitates complete resin impregnation, resulting in lightweight composites with exceptional strength-to-weight ratios and improved stiffness for optimized performance.
- **Excellent Electrical Conductivity:** Offers a surface resistivity of 0.7-2.0 ohms/sq, enabling efficient electromagnetic interference (EMI) and radio frequency interference (RFI) shielding, ultimately enhancing the functionality of electronic devices and systems.
- **Broad Polymer Compatibility:** Compatible with a vast array of high-performance polymers, including epoxy, polyester, vinyl ester, polyimides, PPS, PEEK, PEI, polyurethanes, nylon, polycarbonate, polysulfone, PVDF, and cyanate ester resins, for unmatched versatility across diverse applications.
- **Tailored Design Options:** Available in a variety of thicknesses to precisely meet specific application requirements, providing flexibility during the design phase and streamlined manufacturing processes.
- **Superior Corrosion Resistance:** Provides a compelling alternative to metals in electrically and thermally conductive composites that are intended to be used in corrosive environments significantly enhancing the longevity and durability of composite materials.

TYPICAL PHYSICAL PROPERTIES

Item	Aerial Weight (g/m²)	Dimensions (mm x mm x mm)	AC Conductivity (Ω/□)	Porosity %
BPMF7525-20	20	300 x 300 x 0.13	2.0	85-90%
BPMF7525-45	45	300 x 300 x 0.28	1.1	85-90%
BPMF7525-60	60	300 x 300 x 0.36	0.8	85-90%

PACKAGING

Product is packaged and shipped in single units or in groups of 10.