

Catalog # 06-2518 Monolayer Graphene on Cu (60 mm x 40 mm)

**Physical Properties:**

Growth Method: Chemical Vapor Deposition (CVD synthesis)

Appearance: Transparent

Transparency: &gt;97%

Coverage: 95%

Layers: 1

Thickness (theoretical): 0.345 nm

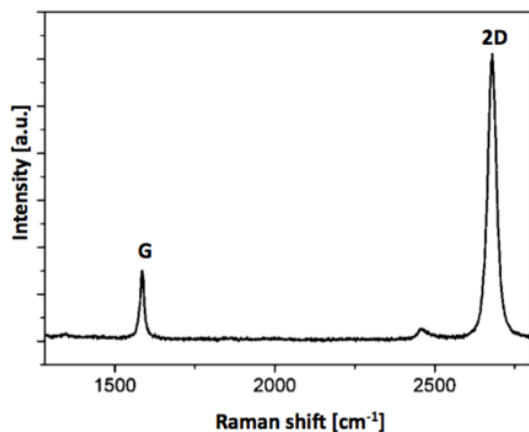
FET Electron Mobility on Al<sub>2</sub>O<sub>3</sub>: 2000 cm<sup>2</sup>/VsFET Electron Mobility on SiO<sub>2</sub>: 4000 cm<sup>2</sup>/VsSheet Resistance on SiO<sub>2</sub>/Si: 410-490 Ω/sq (1 cm x 1 cm)

Grain size: Up to 10 μm

**Substrate Cu foil:**

Thickness: 18 μm

Pretreated for easier bottom layer removal: Monolayer graphene on the back side of Copper is partially removed, but not completely, so an additional treatment like RIE is needed before transfer to eliminate the bottom layer totally

**Applications:** Flexible batteries, electronics, aerospace, MEMS and NEMS, Microactuators, Conductive coatings**Quality control:** Raman Spectroscopy and Optical Microscopy

## References:

1. *J. Electrochem. Soc.*, **2012**, 159, A752.
2. *J. Mater. Chem. A.*, **2013**, 1, 3177.