

Catalog # 06-2510 Monolayer Graphene on Cu (10 mm x 10 mm)

Physical Properties:

Growth Method: Chemical Vapor Deposition (CVD synthesis)

Appearance: Transparent

Transparency: >97%

Coverage: 98%

Layers: 1

Thickness (theoretical): 0.345 nm

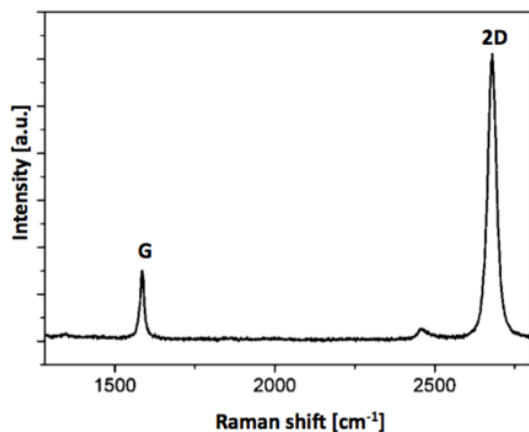
FET Electron Mobility on Al₂O₃: 2000 cm²/VsFET Electron Mobility on SiO₂: 4000 cm²/VsSheet Resistance on SiO₂/Si: 410-490 Ω/sq (1 cm x 1 cm)

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.