xGnP® Graphene Nanoplatelets – Grade M

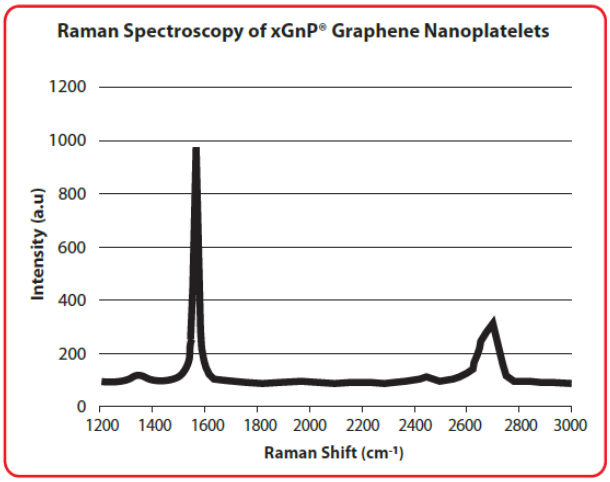
xGnP® Graphene Nanoplatelets are unique nanoparticles consisting of short stacks of graphene sheets having a platelet shape. Each grade contains particles with a similar average thickness and surface area.

Grade M particles have an average thickness of approximately *6 to 8 nanometers* and a typical surface area of *120 to 150 m^2/g*. Grade M is available with average particle diameters of ***5***, ***15,*** or ***25*** microns.

Characteristics of Bulk Powder

Property	*Typical Value*
Appearance	Black granules
Bulk Density	0.03 to 0.1 g/cc
Oxygen Content*	< 1 percent
Residual Acid Content*	< 0.5 wt%

**Note: nanoplatelets have naturally occurring functional groups like ethers, carboxyls, or hydroxyls that can react with atmospheric humidity to form acids or other compounds.*



	Parallel To Surface	Perpendicular To Surface
Density (g/c^3)	2.2	2.2
LOI – Loss on Ignition (wt %)	≥ 99.0	≥ 99.0
Thermal Conductivity (W/m.K)	3,000	6
Thermal Expansion (m/m/K)	4 - 6 x 10^{-6}	0.5 - 1.0 x 10^{-6}
Tensile Modulus (MPa)	1,000	NA
Tensile Strength (MPa)	5	NA
Electrical Conductivity (S/m)	10^{7}	10^{2}

XG Sciences Inc.
3101 Grand Oak Drive
Lansing, MI 48911

+1 517 703 1110
info@xgsciences.com
www.xgsciences.com