

Product Specification Sheet

Products

GLC Graphene Nanoplatelets (GNP), and Few layer graphene (FLG)

Description



GLC's graphene products are available in 2 types depending upon what degree of exfoliation is required, including GNP (multilayer, average particle size <math>< 5000 \text{ nm}</math>) and FLG (<math>< 10</math> layers, average particle size $\sim 180 \text{ nm}$). GLC graphene products are available in powdered form and in off-the-shelf aqueous dispersions, or custom dispersions. Batch to batch consistency is ensured through industry leading production methods and quality control testing. GLC has the production capacity to produce industrial scale graphene additive with tailorable exfoliation to meet application needs. High electrical and thermal conductivity with strong thermal stability at 800°C .

Typical Applications

Coatings, textile materials, electronics, lubricity, energy storage, concrete, flame retardant materials, nanocomposites

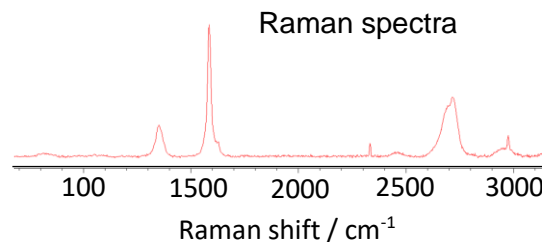
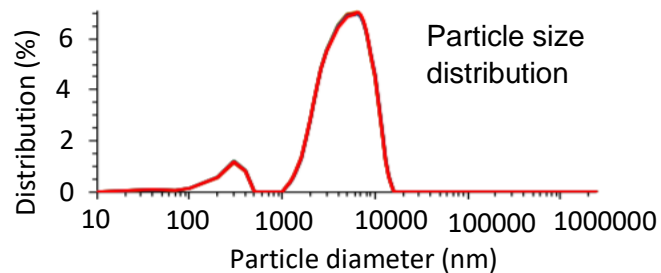
Quality Control

- Particle Size Analysis by Laser Diffraction
- Raman Spectrum: GNP and FLG Material Drop Cast onto Si/SiO₂
- SEM: GNPs cast from 100 g/L aq. dispersion at 1000X magnification

Features and Benefits:

- Easy to use and disperse readily in a wide range of solvents: polymer resins, organic, and water-based formulations.
- High purity raw materials.
- Non-aggregated dispersion enables performance enhancements of many applications.
- Highest performing graphene additives available in tonnage volumes.
- Lateral dimension of GNP <math>< 5000 \text{ nm}</math>
| average sheet resistance <math>< 30 \Omega/\text{sq}</math>
| concentration $\sim 10 \text{ wt.}\%$

G6000 GLC Graphene Nanoplatelets (GNP)



G7000 Few Layers graphene (FLG)

