



11, Gujarat Laghu Udhog Vikas Mandal
Estate, Nr. Shani Dev Temple, Dhobighat
Road, Shahpur, Ahmedabad-380004
Gujarat

NG - 150

Description

Hexa-GnP nano platelets are high purity, low defect, and few nanometer thin platelets of pure carbon. They are produced in several grades and sizes through the proprietary manufacturing process. The unique size and platelet morphology of Hexa-GnP nano platelets make them especially effective at providing barrier while the graphitic structure results in excellent electrical and thermal conductivity. Unlike many other additives, Hexa - GnP nano platelets improves the inherent properties of the matrix material such as impermeability, stiffness, abrasion-resistance, surface hardness and conductivity. Hexa- GnP Nano platelets are compatible with almost all polymers and can be an active ingredient in inks or coatings. The unique non-oxidizing manufacturing processes give the Hexa - GnP Nano platelets a pristine graphitic surface of sp^2 carbon molecules that makes it especially suitable for applications requiring high electrical or thermal conductivity.

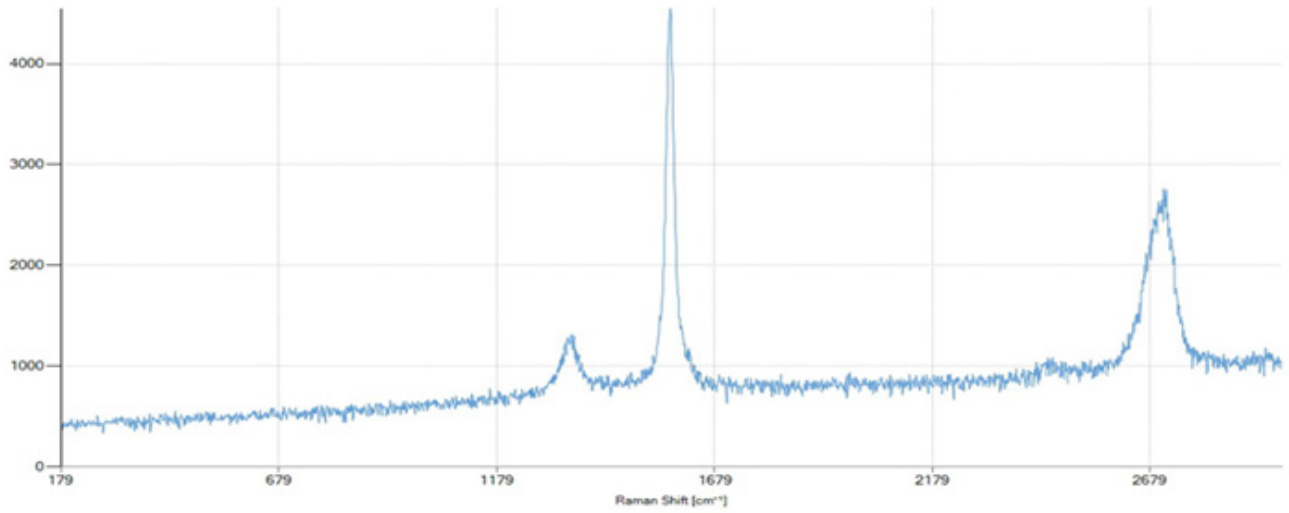
Properties

Appearance	Black Fluffy powder
Carbon	> 99%
Oxygen	<1 %
Surface Area	150-250 (m ² /gm)
Bulk Density	2.0 (gm/cc)
Lateral Size	0.5-5 (Micron)
Thickness	2-8 (nm)
Electrical Conductivity	10^7 (S/m)
Thermal Conductivity	3000 (W/m.K)

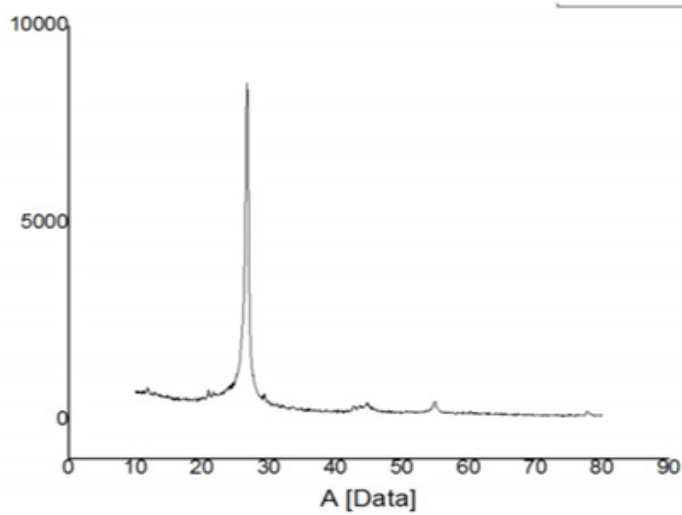
Applications

- Anode material for Lithium – Ion batteries
- Additives for Lubricants
- Additives for Concrete
- Barrier Coatings for anti-corrosion
- Barrier Coatings for packaging
- Chemical and biochemical sensors
- Super capacitors
- Electrical Conductive Inks
- Films and coatings for EMI shielding
- Thermally conductive inks and Coatings
- Heat Spreaders
- Additive for High Strength, Lightweight composites
- Additive for metal – matrix composites
- Thermal Interface Materials

Raman Spectroscopy Result



XRD Result



SEM Test Image

