

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

## NRG - 350

### Description

Reduced Graphene Oxide nanoplatelets (NRG) are high purity, low defect, 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 makes them especially effective as electrodes for energy storage. NRG sheets are compatible with almost all polymers making them a suitable active ingredient for inks and coating.

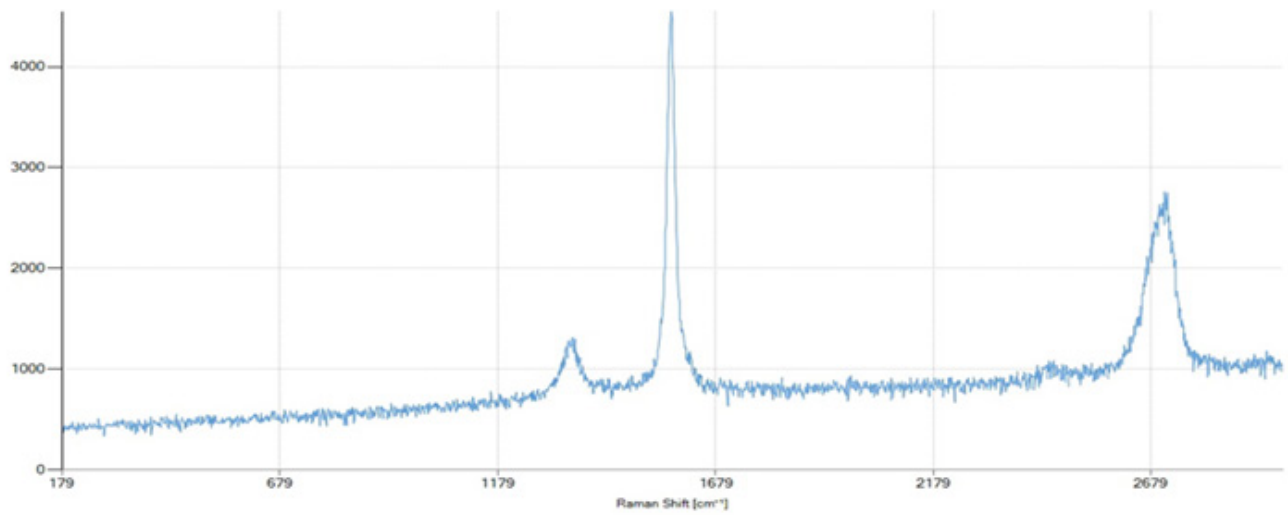
### Properties

|                                   |                     |
|-----------------------------------|---------------------|
| Appearance                        | Black Fluffy powder |
| Carbon                            | > 80%               |
| Oxygen                            | <20%                |
| Residual Acid                     | < 0.5%              |
| Surface Area (m <sup>2</sup> /gm) | 350 - 450           |
| Bulk Density (gm/cc)              | 0.02 – 0.1          |
| Lateral Size (Micron)             | 0.5 - 25            |
| Thickness (nm)                    | 1.2 - 8             |

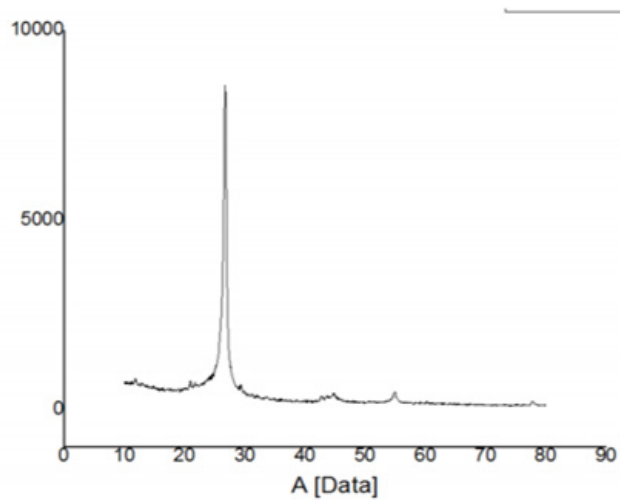
### Applications

- Anode for Lithium – Ion batteries
- Additives for Lubricants
- Barrier Coatings for anti-corrosion
- Barrier Coatings for packaging
- Chemical and biochemical sensors
- Super capacitors
- Electrical Conductive Inks
- Thermally conductive inks and Coatings
- Heat Spreaders
- Additive for metal – matrix -composites
- Thermal Interface Materials

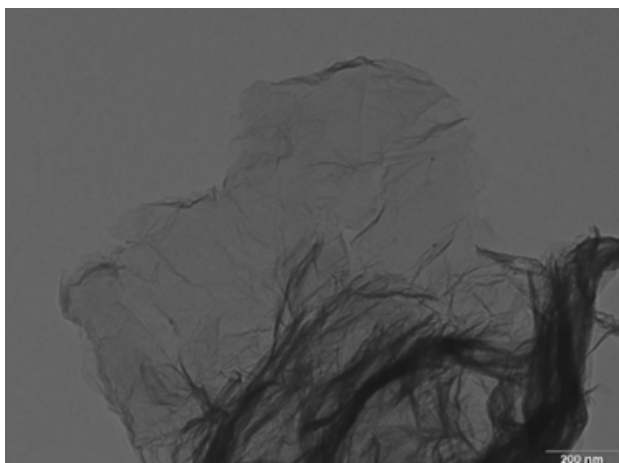
## Raman Spectroscopy Result



## XRD Result



## SEM Test Image



## HR - TEM Test Images

