

# Product Information Sheet

First Graphene Ltd. is Australia's leading graphene company.

The company's leadership position is founded upon its proprietary process for the direct manufacture of the **best quality graphene from high grade graphite ore**. The single step exfoliation process which was developed in collaboration with the University of Adelaide is being scaled today to a 90 tonne/year capacity at the company's production facility at Henderson, WA. First Graphene Ltd. relies upon its own extensive resources of the world's highest grade natural graphite from Sri Lanka as a raw material to ensure product quality and consistency.

## Advantages of working with First Graphene Ltd.:

- **Single step manufacture of high quality, low defect graphene.**
  - Direct exfoliation of graphite ore for cost effective graphene products.
  - Scaled process supporting tonnage orders.
- **Range of graphene products to suit your application.**
  - Graphene products are available in a range of platelet sizes; from 10 to 50 micron.
  - Dispersed graphene products available.
- **Unique, high performance fire-retardants and concrete strengthening additives.**
  - Fire retardant coating products.
  - Concrete additives for increased strength.

First Graphene Ltd is actively working with a range of customers and partners to develop a range of graphene products. Please talk to us about your graphene needs.

### LIMITED WARRANTY INFORMATION:

The information contained herein is offered in good faith and is believed to be accurate at the time of printing. This information should not be used as a substitute for your own quality control and/or testing procedures to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

## High Quality, Low Defect Graphene Products:

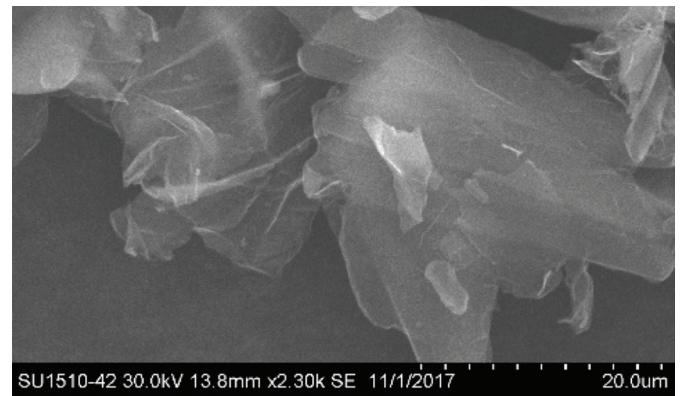


Fig.1: Scanning Electron Microscopy, SEM image showing FGR Graphene Powder product with typical platelet sizes of 20 to 40 micron. A range of products with platelet (X-Y) size from 10 microns up to 60 microns are available. Atomic Force Microscopy, AFM confirms typical platelet thicknesses of 5-10nm.

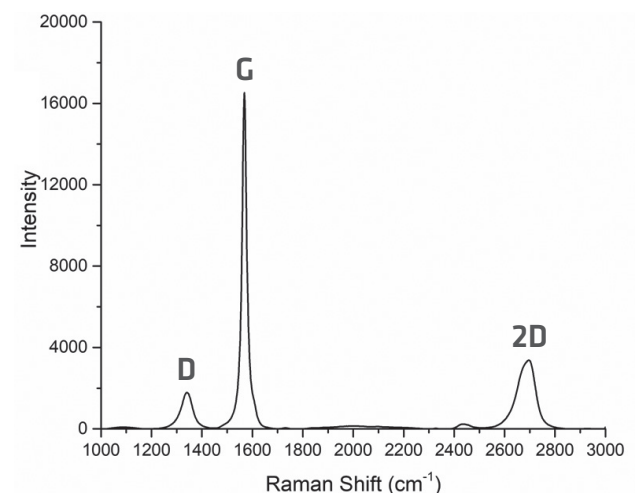


Fig. 2: Raman spectrum of FGR Graphene Powder showing a strong G band and a low D/G ratio of 0.12 confirming the pristine nature of these products. The 2D band shape at ca. 2700cm<sup>-1</sup> also confirms the absence of graphite.

## Sheet Resistance = 6.3 Ohm/square

Sheet Resistance measured by 4-point probe measurement of a ca. 25 micron thick film of the FGR Graphene Powder product.

## Carbon Content = 98 - 99%w/w

Thermogravimetric Analysis, TGA confirms the low inorganic residues within the FGR Graphene Powder product.