

## Technical Data Sheet

### Graphene Nano-Platelets

A high purity Carbon nano-material featuring few-layer graphene

IENT Graphene is a few-layer graphene nano-platelet powder with high lateral dimensions. IENT Inc.'s manufacturing process produces high quality, non-oxidised sp<sup>2</sup> carbon flakes supplied as a powder.

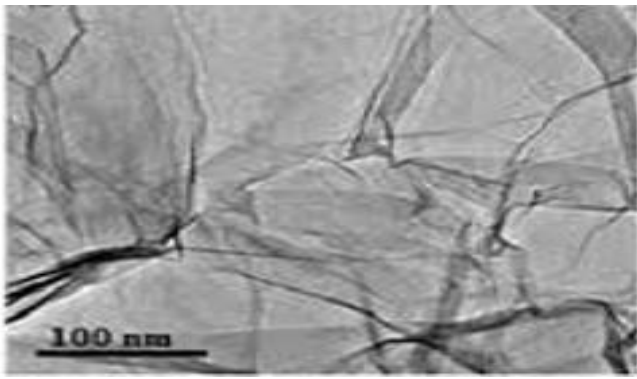
Parameters	Description
Thickness	~02-05 nm
Available form	Black powder
Porosity	1 nm
Purity	>98%
Layers	2-4
Atomic Oxygen Content	<0.5%
Specific Surface area	~220 m <sup>2</sup> /g
Bulk density	0.8g/cc

"Graphene is an allotrope of carbon whose structure is a single planar sheet of sp<sup>2</sup> bonded carbon atoms that are densely packed in a honeycomb crystal lattice".

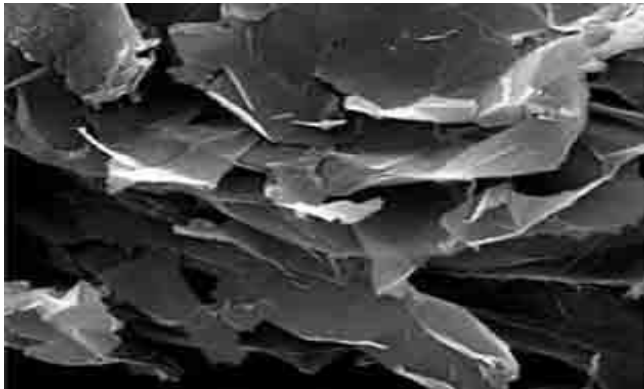
We supply graphene of high quality at very competitive price. We also provide graphene in various forms and its relative technologies to fulfil the demands of our customers.

#### Notes:

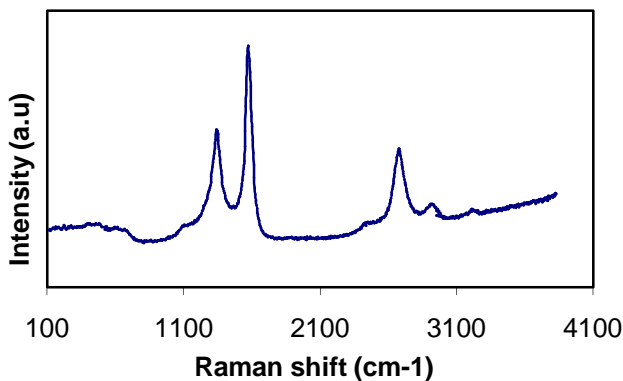
- It should be stored in a cool, dry, well-ventilated place.
- It should be used gently and operated in enclosed place with exhaust fan
- Wearing suitable respiratory protective mask, chemical safety protective glasses and gloves is required.
- While using water fog, foam, dry chemicals or carbon dioxide to put out fire, wearing suitable respiratory protection equipment is necessary.
- Generally, its chemical properties are stable; Avoiding heat, fire and strong oxidants are recommended.



TEM image showing good quality few layer Graphene with typical two dimensional Structure different layer thickness.



Scanning Electron Microscopy, SEM image showing FGR Graphene Powder product with typical platelet sizes of 20 to 40 micron.



Raman spectrum of Graphene Powder showing a strong G band with low D/G ratio confirming the pristine nature of these products. 2D band shape indicate the presence of few-layer graphene flakes, which are typically below ten layers in thickness.

## Advantages of working with IENT Inc.

- 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 20 to 40 microns.
- Dispersed graphene products are available.
- Unique, high performance fire-retardants and concrete strengthening additives.
- Fire-retardant coating products.
- Concrete additives for increased strength.

IENT Inc. 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.

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