



Graphene Nanoplatelets

Product Catalogue

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Working

The nanoplatelets form with the multiple layers, where the thickness in nanometers and diameter in the microns. These layers are attached each other by strong Van Der Waals force of attraction. It added in the polymers like rubber, nylon, and plastic to improve conductivity, tensile strength, corrosion resistance, stiffness, mechanical reinforcement, hardness and gas barrier properties. The incorporation percentage in polymer varies from 2 to 10% as per applications. There are 5 to 10 layers in the graphene nanoplatelets. It is manufactured in bulk quantity by chemical exfoliation methods.

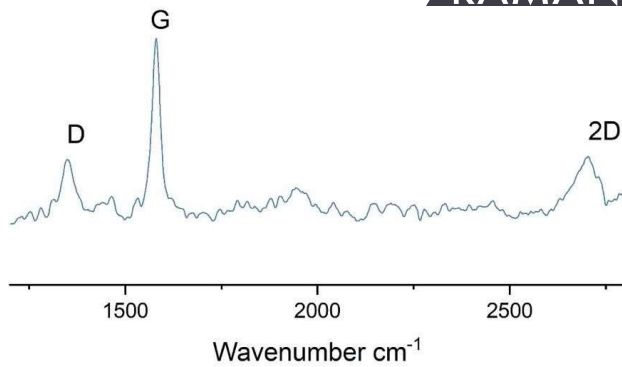
Product Code: GRAPH-NANOPLATE-001

Technical Properties

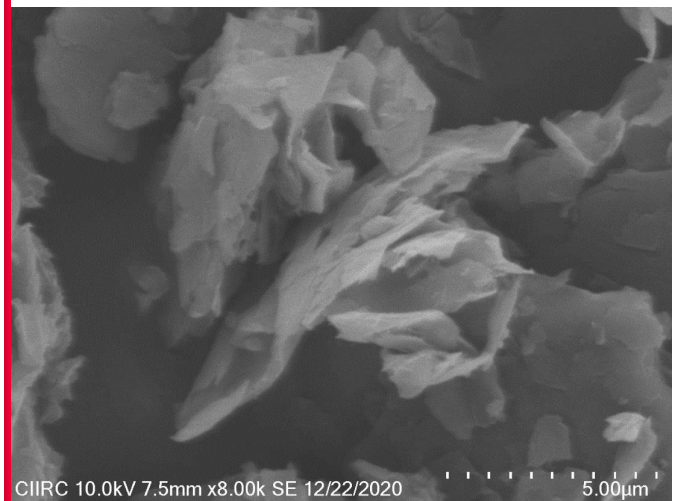
<i>SPECIFICATIONS</i>	<i>VALUES</i>
Bulk Density	0.18 g/cm ³
Diameter Average X &Y Dimensions	1-5 μ m
Thickness Average Z Dimension	5 - 10 nm
Carbon Purity	>99%
Oxygen Content	<1%
Form Factor	Powder/Flack
Colour	Black
Number of Layers	Average number of Layer 5 - 10 layers
Surface Area	60-200 m ² /g
Physical Form	Fluffy, Very Light Black Powder
Chemical Formula	C
Cas No.	7782-42-5

Characterization Analysis

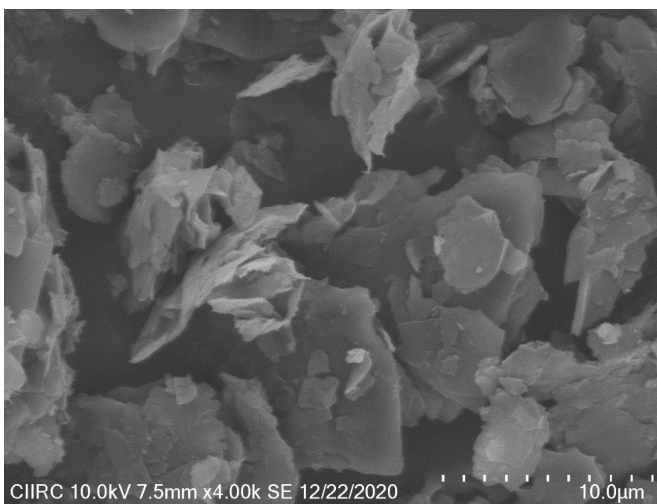
RAMAN



SEM 1



SEM 2



Applications

- Transport Industry
- Energy Industry
- Electronics Industry
- Aerospace Industry
- Infrastructure Industry
- Improve the properties of polymers composite
- Improve the properties of thermoplastics
- Improve the properties of metal matrix composite
- Improve the shell life in various batteries

Features

- Improves electrical, thermally conductive, and mechanical stability
- Fragile exfoliated sheets
- High purity
- Excellent aspect ratio
- Low density and Light Weight
- Superior Mechanical, Electrical, and thermal properties

Safety Instructions

- Protective gloves should be worn at the time of operation.
- Safety goggle is a must during handling.
- Do not touch any part of the skin or eyes while using.
- Store in a moisture-proof dry place.

Packaging

It is supplied in a highly-protective moisture-proof barrel with a seal. Generally, it is supplied on a bulk quantity for the industrial use.

Handling

When handling, the operator should use powder-free non-latex gloves, which should be held carefully. While experimenting, if the operator uses a nanoplatelets with bare hands, the chances of contamination due to finger oil are very high. Therefore, it is advised to use nylon or polyester gloves.



Feel Free to Reach Us

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