



Graphene Oxide

Product Catalogue

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Working

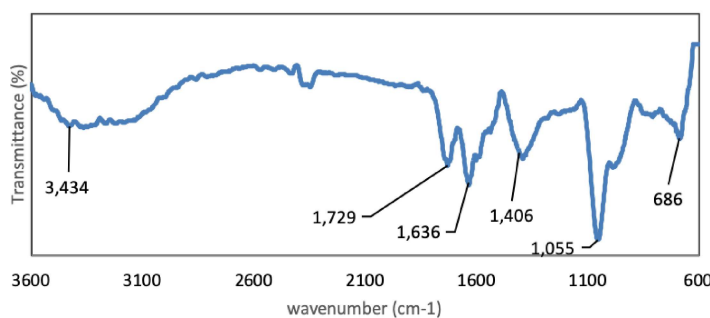
Graphene Oxide (GO) is a two-dimensional nano-membrane of highly oxidized carbon atoms decorated with functional groups containing oxygen at its edges and basal plane. These groups provide their legendary solubility, making it unique in the world of nanotechnology. Graphene Oxide is produced from the Modified Hummer Method. It is an oxidized form of Graphene laced with the oxygen-containing group.

Product Code: GRAPHOX

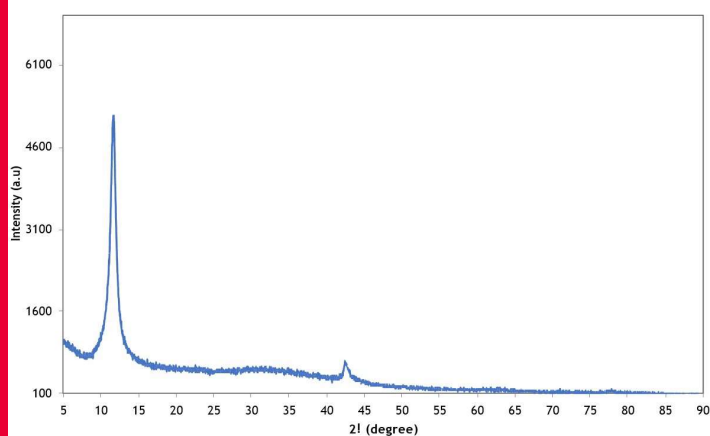
<i>Specifications</i>	<i>Values</i>
Bulk Density	0.5 g/cm ³
Average Lateral X &Y Dimensions	5 - 10 μ m
Thickness Average Z Dimension	0.8 - 2 nm
Carbon Content	60-80 %
Oxygen Content	15-32 %
Hydrogen Content	1-2 %
Sulfur Content	< 1 %
Carbon Purity	>99%
Form Factor	Powder
Colour	Black
Number of Layers	Average number of Layer 1 - 3 layers
Surface Area	110-250 m ² /g
Physical Form	Fluffy, Very Light Black Powder
Chemical Formula	C

Characterization Analysis

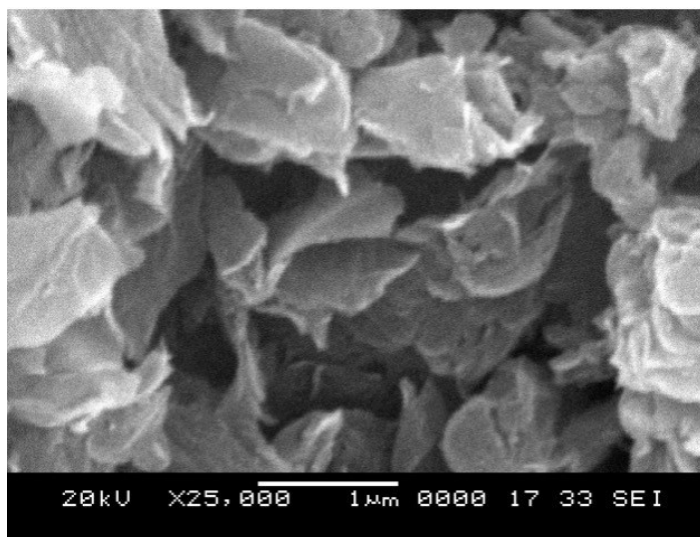
FTIR



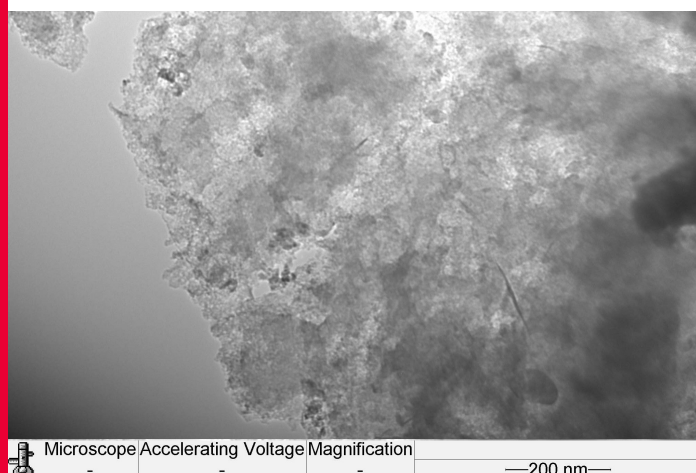
XRD



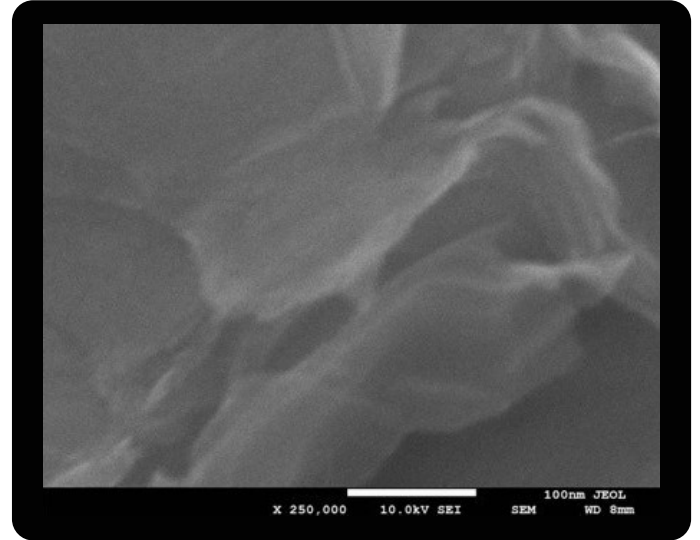
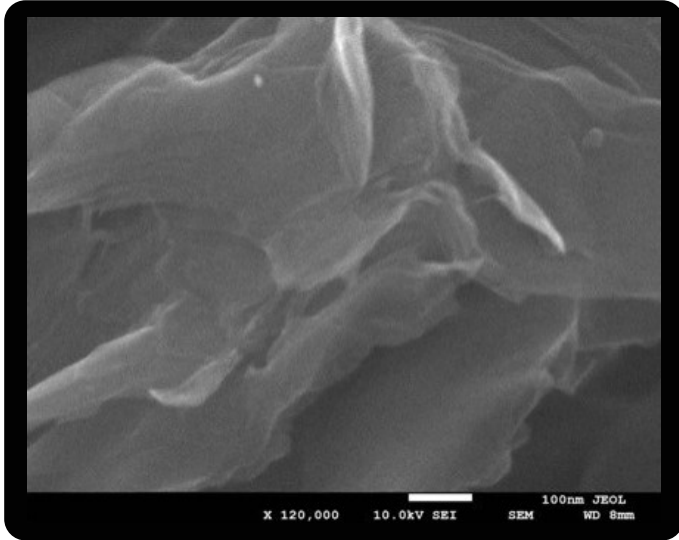
SEM



TEM



FESEM



Applications

- Chemical Sensors
- Solar Cell
- Water Desalination
- Dispersion
- Flexible Electronics
- Anti-Barrier Coating
- Improve the properties of Concrete
- Improve the properties of paints & coatings
- Improve the properties of polymers composite
- Improve the properties of Elastomers

Features

- It is electrically insulating due to a disruptive sp^2 bonding network and can be conductive by restoring the network.
- Fragile exfoliated sheets
- High purity
- Excellent aspect ratio
- Easily dispersibility in water and another organic solvent
- Superior Mechanical, Electrical, and thermal properties
- Small Addition will improve the barrier 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.

Storage, Precautions & Disclaimer

It is supplied in a highly-protective moisture-proof bottle with a seal. It is finally packed in a shockproof sheet with a corrugated box.

Handling

When handling, the researcher should use powder-free non-latex gloves, which should be held carefully. While experimenting, if the operator uses a nanopowder 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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