



Multiwalled Carbon Nanotubes (MWCNT)

Product Catalogue

Call Us: +91-8007799090 | +91-9765849656

Website: www.techinstro.com | E-Mail: info@techinstro.com

Working

The Multi-Walled Carbon Nanotubes (MWCNTs) are made from carbon tubular concentric tunnels with around 10-9 nm diameter. It is a composite structure of concentrically layered carbon nanotubes nested in each other. It is an allotrope of carbon (i.e., graphene), one of the most robust materials for many purposes and applications. The MWCNTs are highly resistant to chemicals and do not produce heat. Therefore, they are mainly used in many devices that heat up for longer hours. Being highly conductive, they are remarkable in exhibiting electricity. We make purified multi-walled carbon nanotubes produced from the chemical vapour deposition method with a multiple-point of quality check.

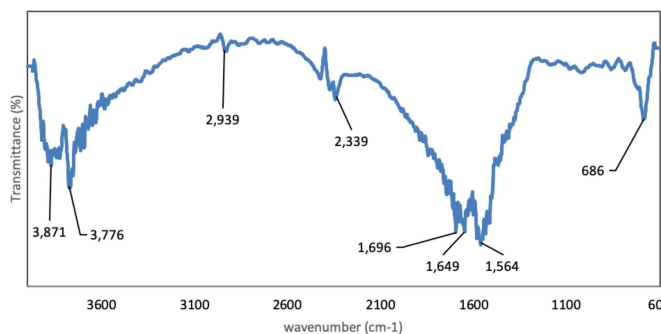
Product Code: TI-MWCNT-001

Technical Properties:

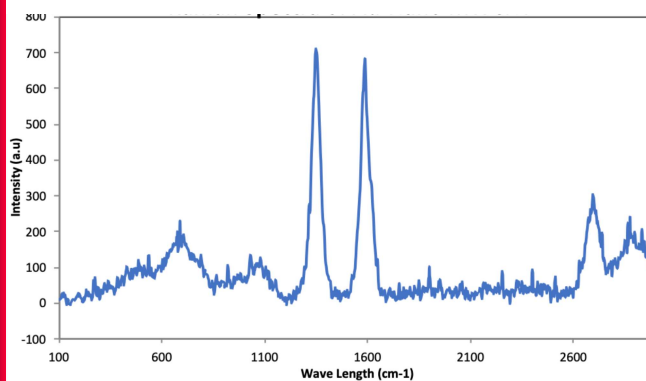
<i>SPECIFICATIONS</i>	<i>VALUES</i>
Bulk Density	0.04 g/cm ³
Outer Diameter	10-30 nm
Inner Diameter	5 - 10 nm
Purity	>99%
CNT Content	95-99%
Form Factor	Powder
Colour	Black
Surface Area	110-350 m ² /g
Physical Form	Fluffy, Very Light Black Powder
Chemical Formula	C
Cas No.	7782-42-5

Characterization Analysis

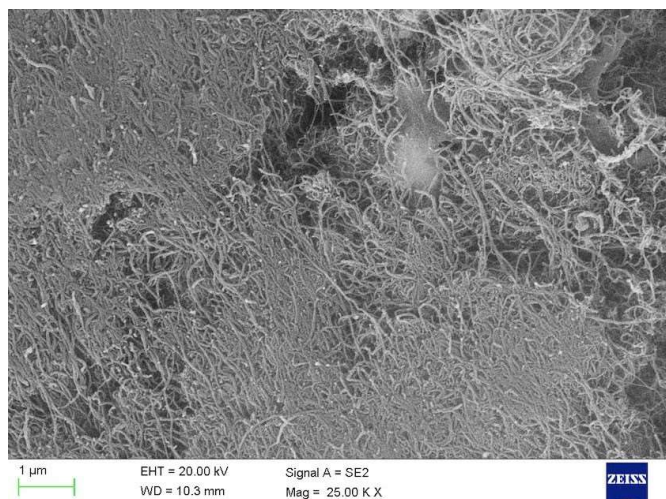
FTIR



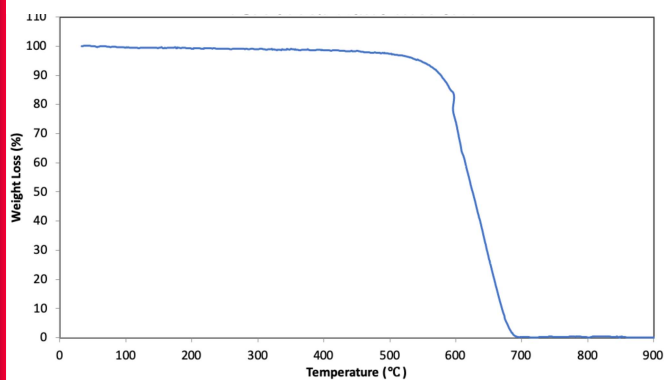
RAMAN



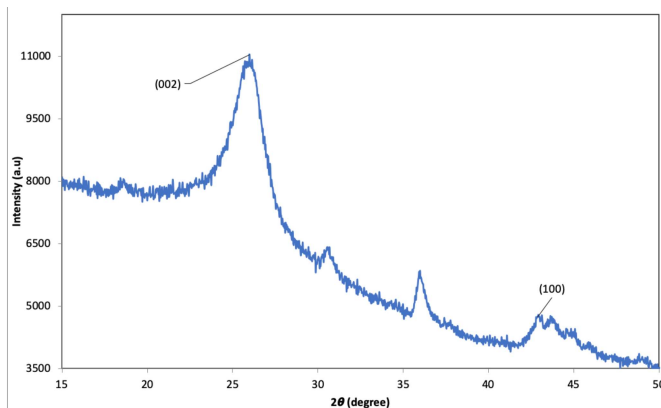
SEM



TGA

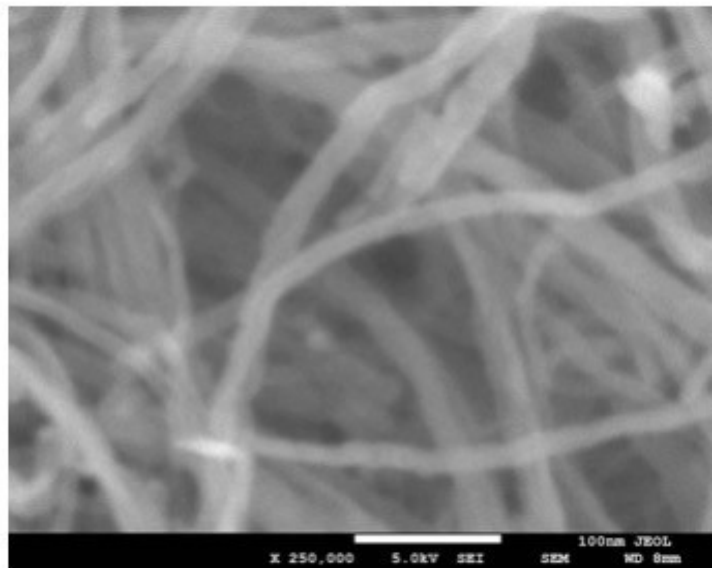
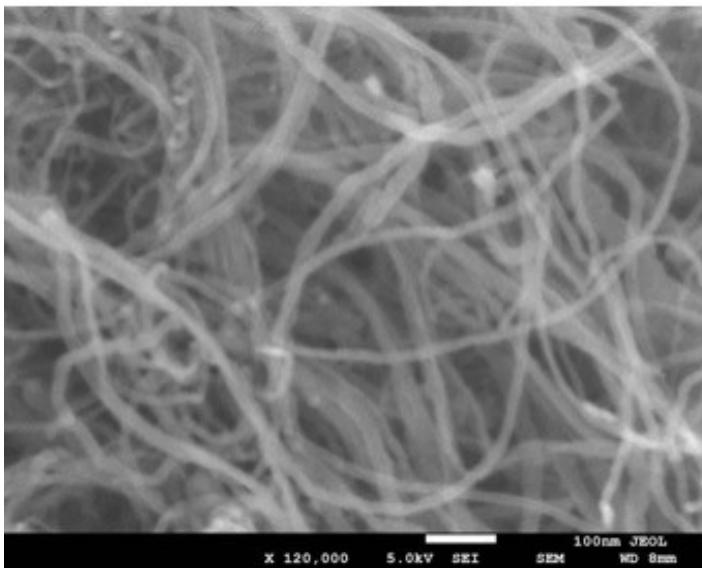
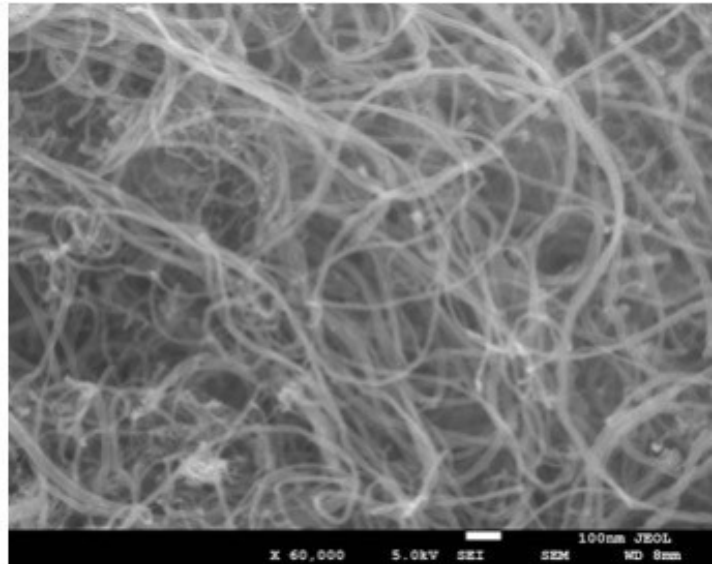
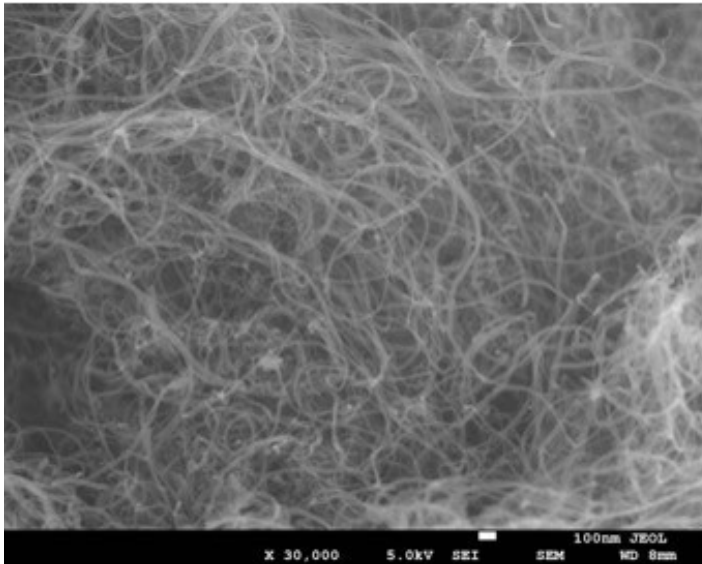


XRD



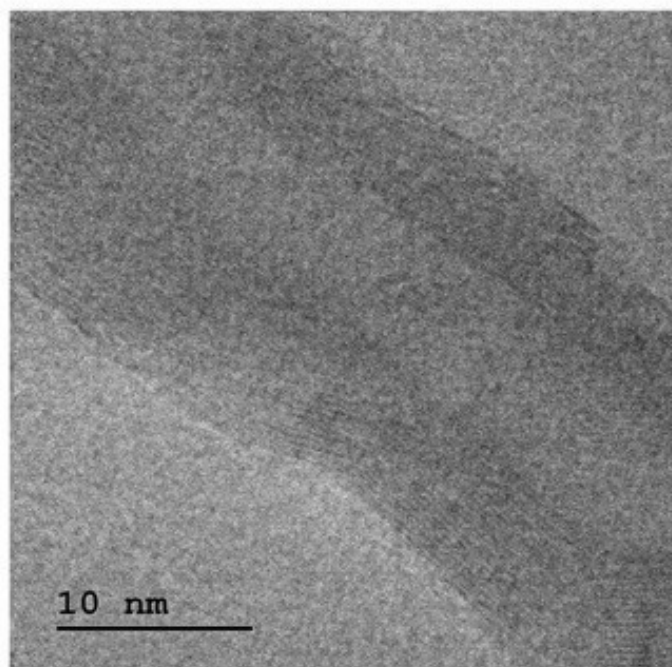
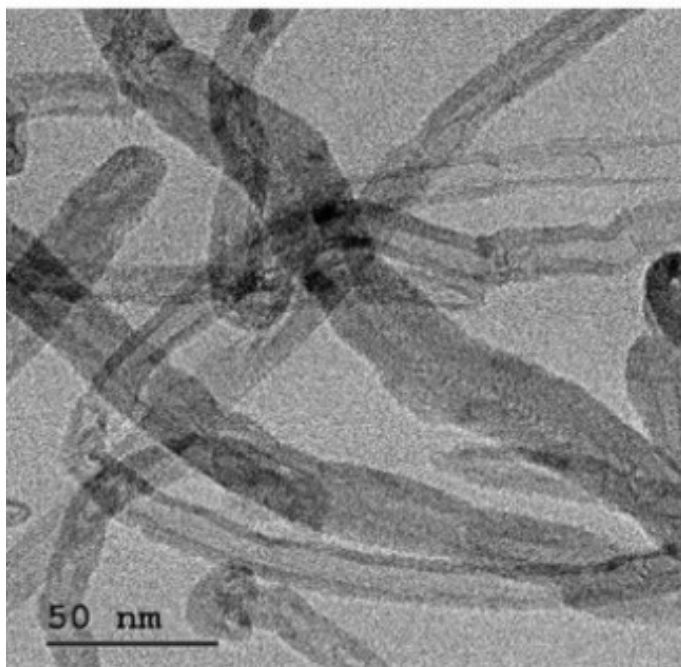
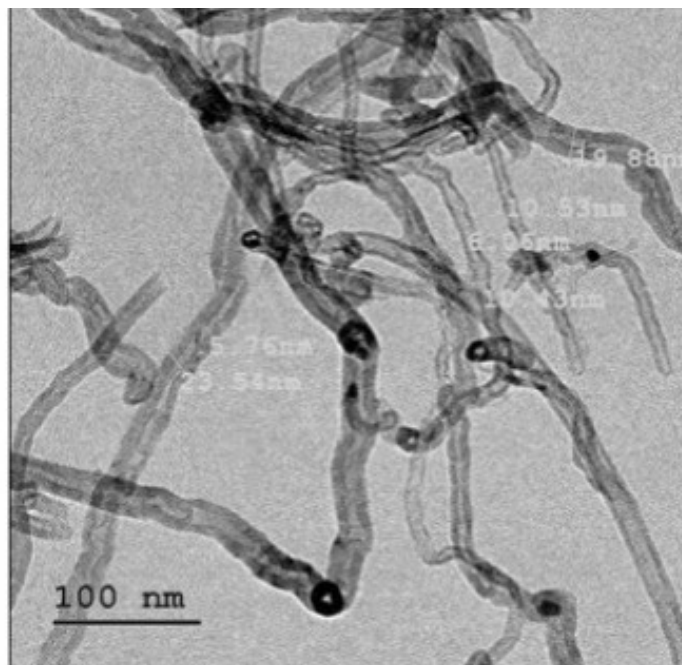
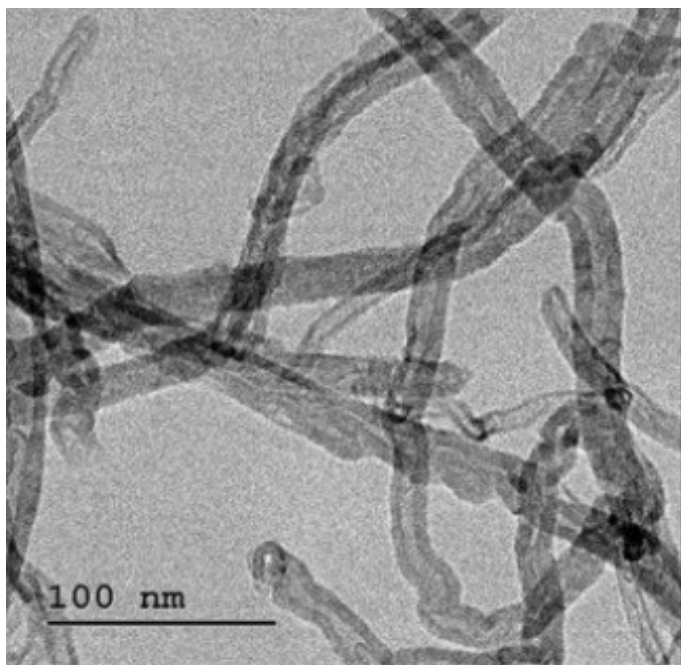
Characterization Analysis

FESEM



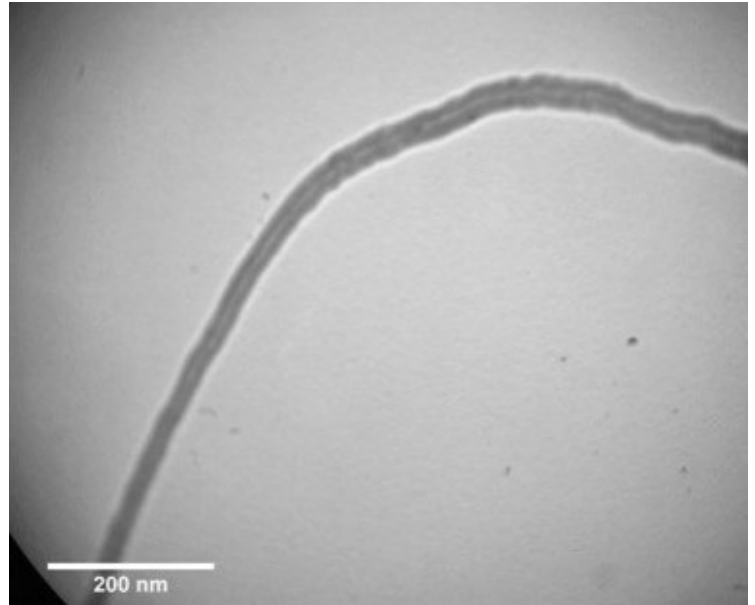
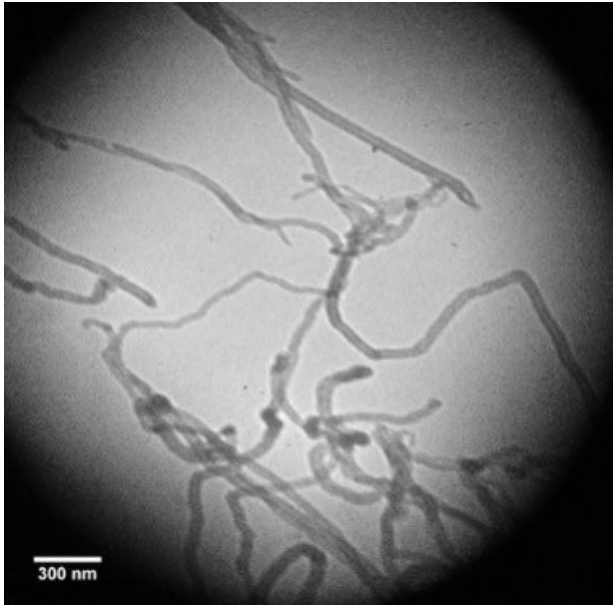
Characterization Analysis

HR TEM



Characterization Analysis

TEM



Applications

- Fuel Cell
- Conductive Inks
- Supercapacitors
- EMI Shield Coating
- Electronics Industries
- Anti-corrosion paints & coatings
- Improve the properties of polymers composite
- Improve the properties of thermoplastics
- Improve power and energy density and extend battery cycle life
- Improve the shell life in various batteries

Features

- Improves electrical, thermally conductive, and mechanical stability
- High purity
- Excellent aspect ratio
- Low density and Light Weight

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 bottle with a seal. Generally, it is provided in bulk quantity for 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 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

+91-8007799090 | +91-9765849656

www.techinstro.com | info@techinstro.com