



Single Walled Carbon Nanotubes

Product Catalogue

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Working

Graphene, an allotrope of carbon, is used to make carbon nanotubes. Single-walled carbon nanotubes (SWCNT) are one-dimensional CNT that looks like a regular hexagonal lattice, which extends infinitely into a cylindrical hollow tube. The SWCNT constitutes a single layer of graphene atoms rolled into tubes with less than a 1-nanometer diameter. We use Catalytic Chemical Vapor Deposition (CCVD) method for synthesis, where we made the ultra-pure single-walled carbon nanotubes in powder and dispersed form. The researcher might want to use it for research purposes.

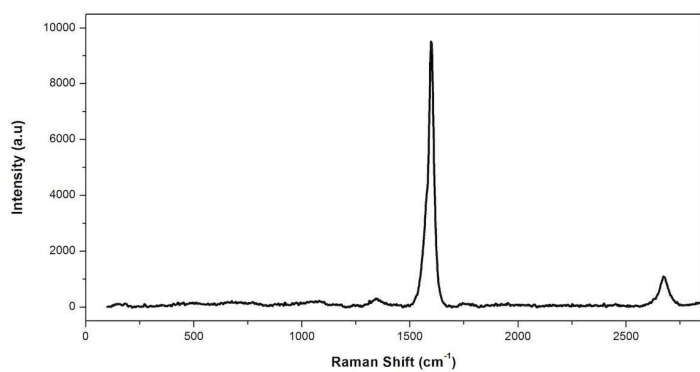
Product Code: TI-SWCNT

Technical Properties:

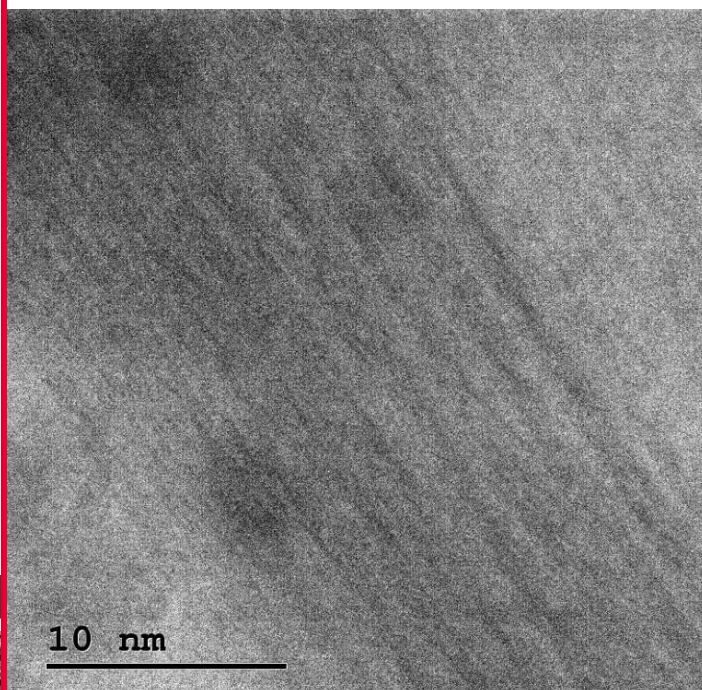
<i>SPECIFICATIONS</i>	<i>VALUES</i>
Bulk Density	0.1 g/cm ³
Average Diameter	1.8 nm
Length	>5 µm
Purity	>99%
Carbon Content	>85%
Number of Layers	1-2
Form Factor	Powder
Colour	Black
Surface Area	490 m ² /g
Physical Form	Fluffy, Very Light Black Powder
Chemical Formula	C
Cas No.	7782-42-5

Characterization Analysis

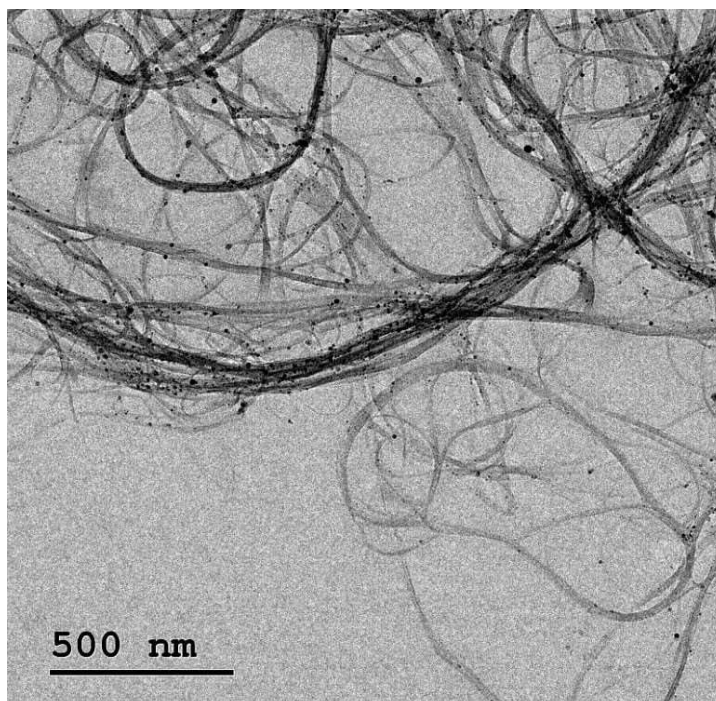
RAMAN



HRTEM



HRTEM 1



Applications

- Cells And Batteries
- Electric Wires
- Conductive Adhesive
- Sports Equipment
- Structural Materials
- Aviation Utilized in Catalyst Supports
- Tissue Engineering
- Composite Polymers for Tires
- Automobile Parts
- Bulletproof Vests
- Water-Resistant Fabrics
- Drug Delivery
- Air & Water Filtration
- Energy Storage
- Multipurpose Coatings

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 goggles are 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 for research purposes in a retail quantity.

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

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