

## Technical data

Categories No: TNMC2

Name: -COOH Functionalized Multi-walled Carbon Nanotubes  
(MWCNTs-COOH)

Purity: >95%

-COOH Content: 2.56wt%

(The rate of surface carbon atom: 8-10mol%)

OD: 8-15nm [OD=Outer Diameter]

ID: 3-5nm [ID=Inner Diameter]

Length: ~50um

SSA: 130m<sup>2</sup>/g [SSA=Special Surface Area]

Color: Black

Tap density: 0.13g/cm<sup>3</sup>

True density: ~2.1 g/cm<sup>3</sup>

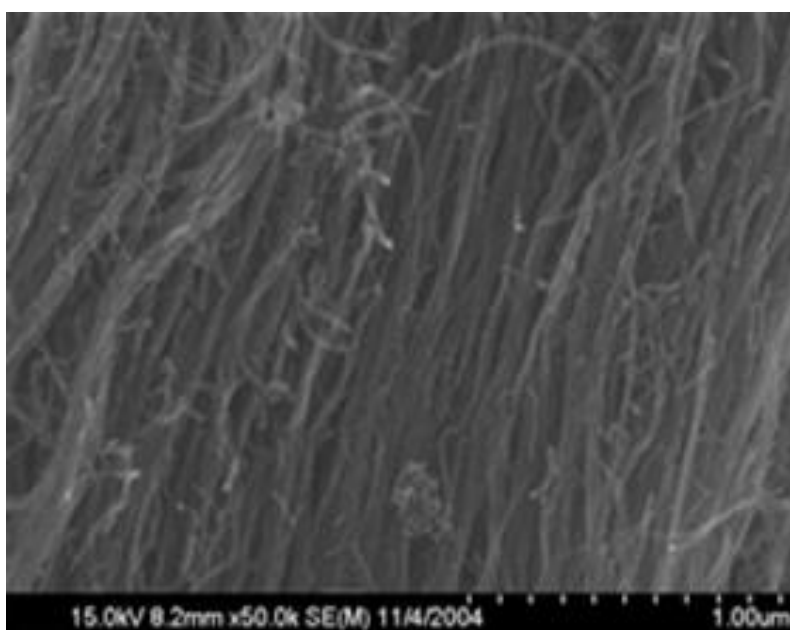
EC: >100s/cm [EC=Electric Conductivity]

Making method: CVD

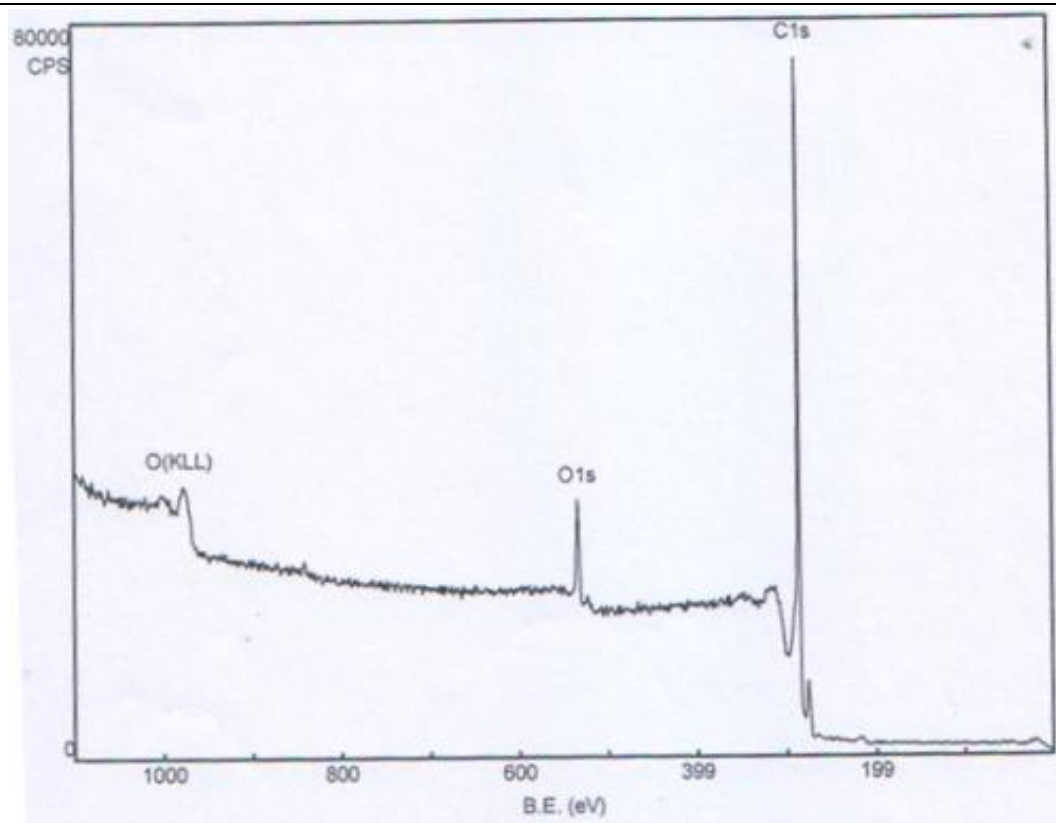
## Testing pictures



Transmission Electron Microscopy (TEM)



Scanning Electron Microscopy (SEM)



### XPS

Components	Area(CPS)	Contents	Components
C	8000	0.25	93.78%
O	1400	0.66	6.22%

### Application instruction

Potential Applications of Carbon Nanotubes

Additives in polymers

Catalysts

Electron field emitters for cathode ray lighting elements

flat panel display

gas-discharge tubes in telecom networks

Electromagnetic-wave absorption and shielding

Energy conversion

Lithium-battery anodes

Hydrogen storage

Nanotube composites (by filling or coating);

Nanoprobes for STM, AFM, and EFM tips

nanolithography

nanoelectrodes

drug delivery

sensors

Reinforcements in composites

Supercapacitor