

## Technical data

Categories No: TNMC1

Name: -COOH Functionalized Multi-walled Carbon Nanotubes

(MWCNTs-COOH)

Purity: >98%

-COOH Content: 3.86wt%

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

OD: 5-15nm [OD=Outer Diameter]

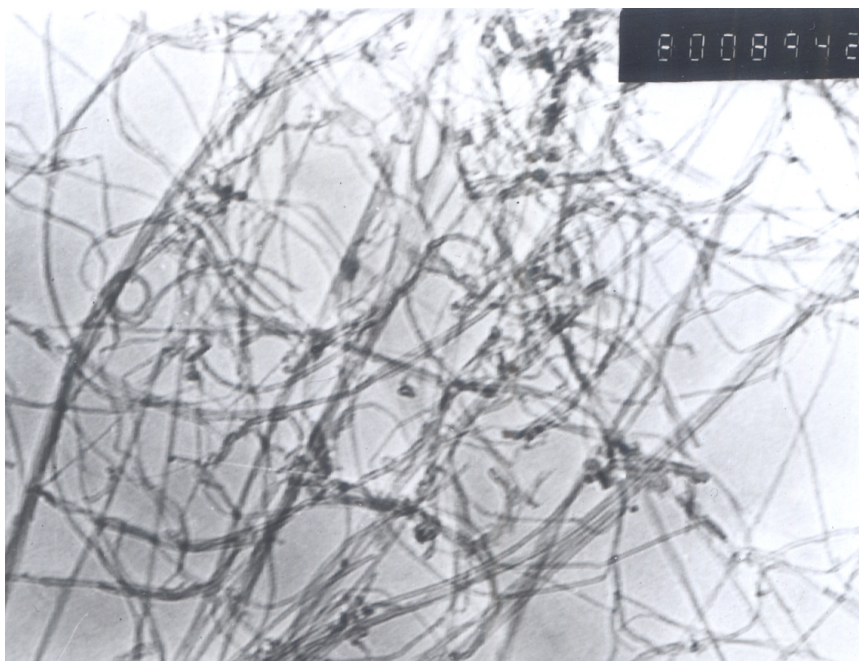
Length: 10-30um

SSA: 220-300m<sup>2</sup>/g [SSA=Specific Surface Area]

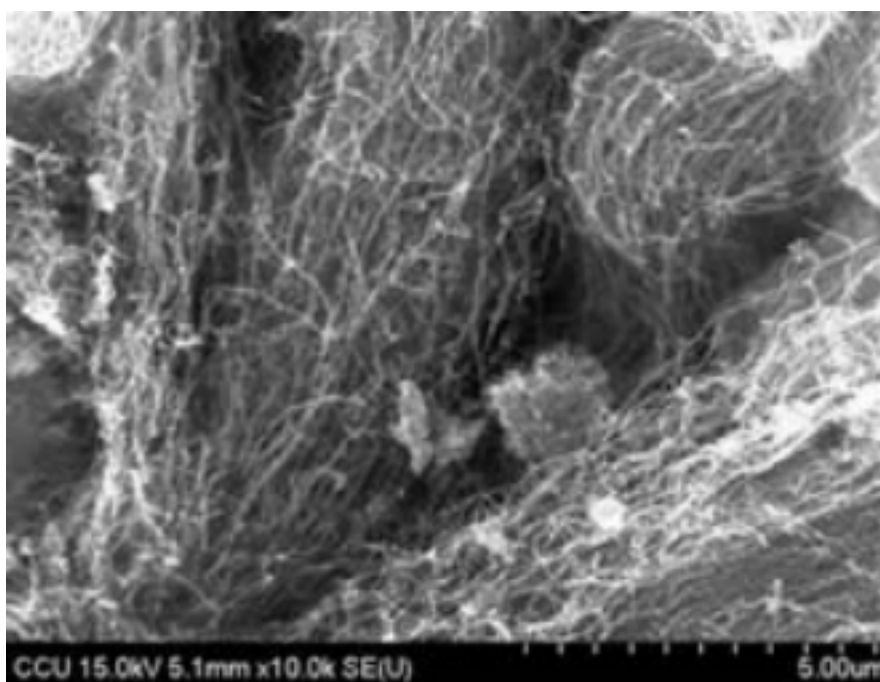
Color: Black

Making method: CVD

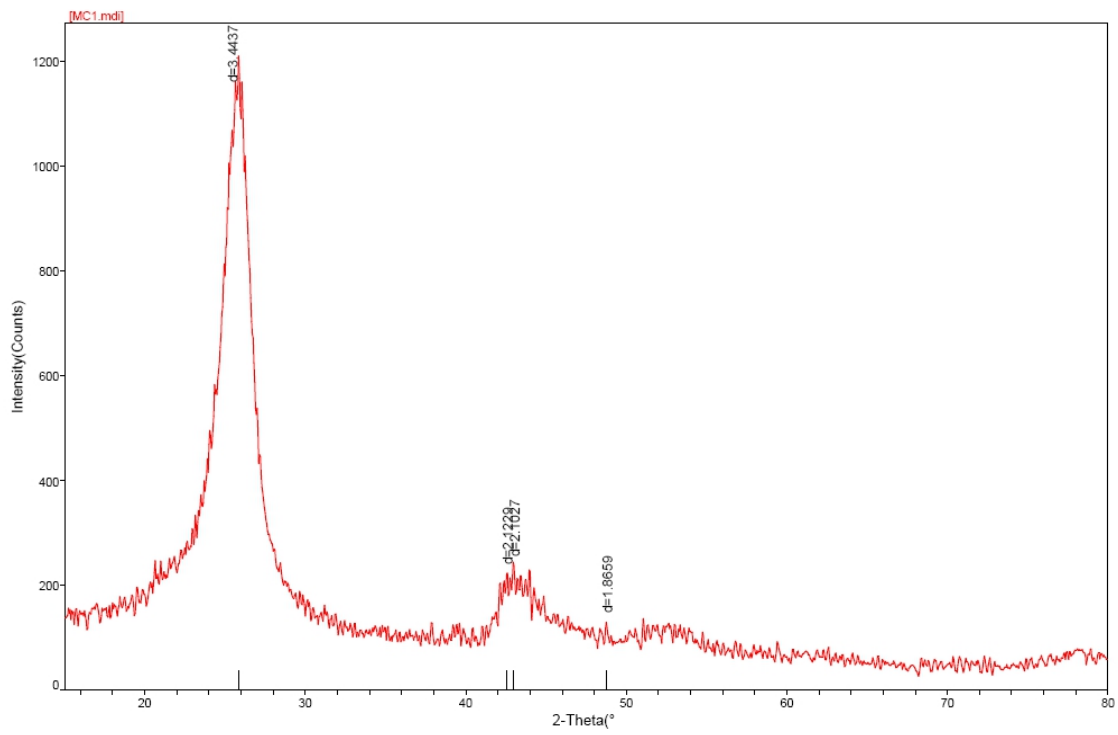
## Testing pictures



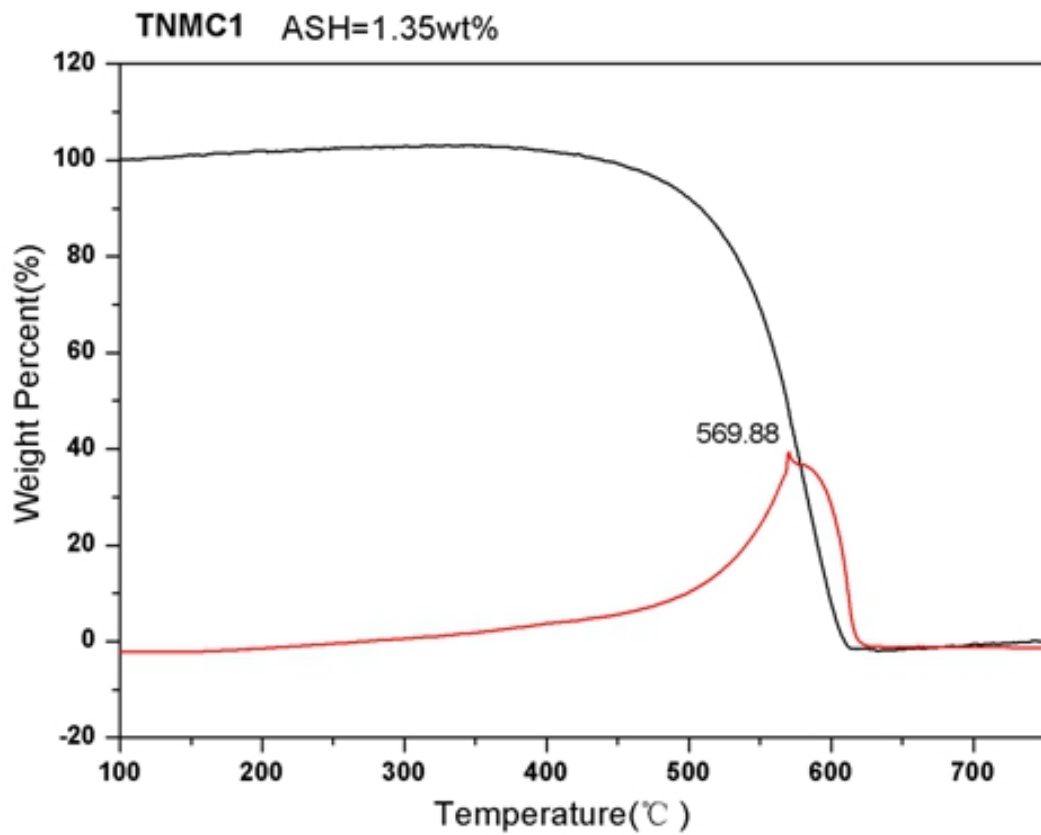
Transmission Electron Microscopy (TEM)



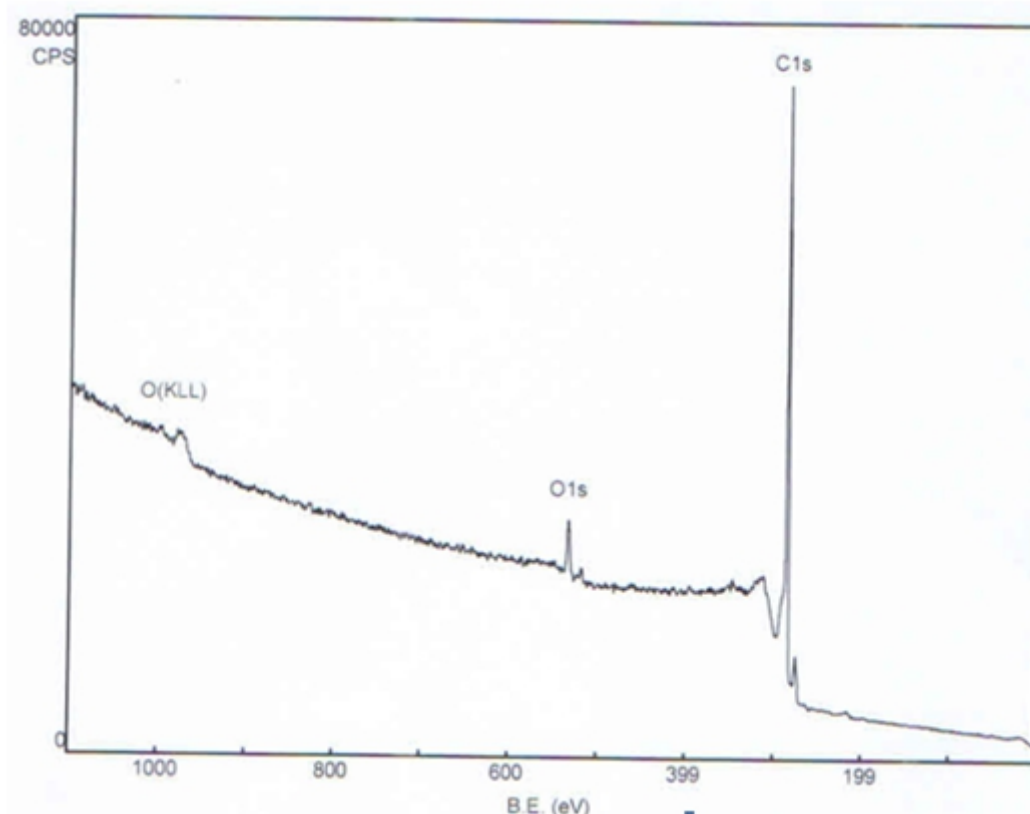
Scanning Electron Microscopy (SEM)



XRD



TGA



### XPS

Components	Area(CPS)	Contents	Components
<b>C</b>	<b>52000</b>	<b>0.25</b>	<b>94.95%</b>
<b>O</b>	<b>7300</b>	<b>0.66</b>	<b>5.05%</b>

### 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