



Technical Data Sheet

ACS Material Industrial Single-Walled Carbon Nanotubes (SWNTs)

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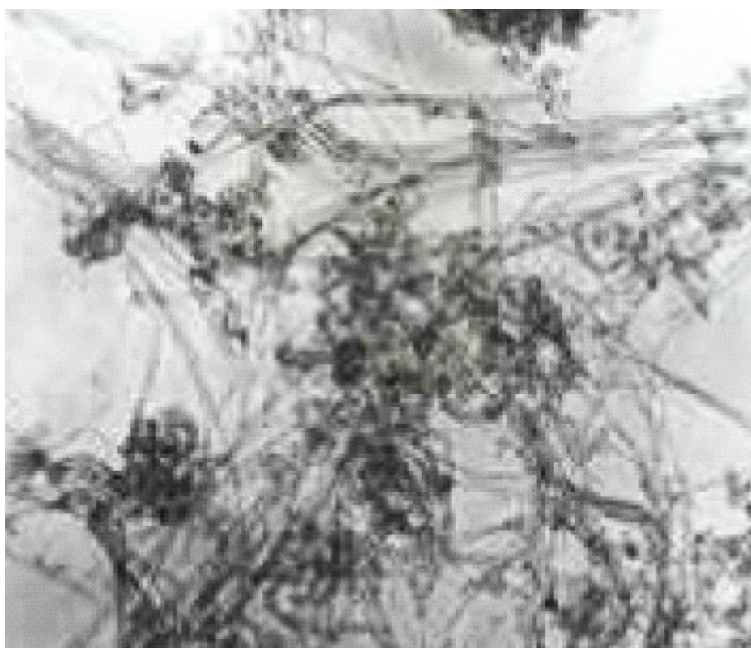
1. Preparation Method

Type A: Floating Catalyst Method

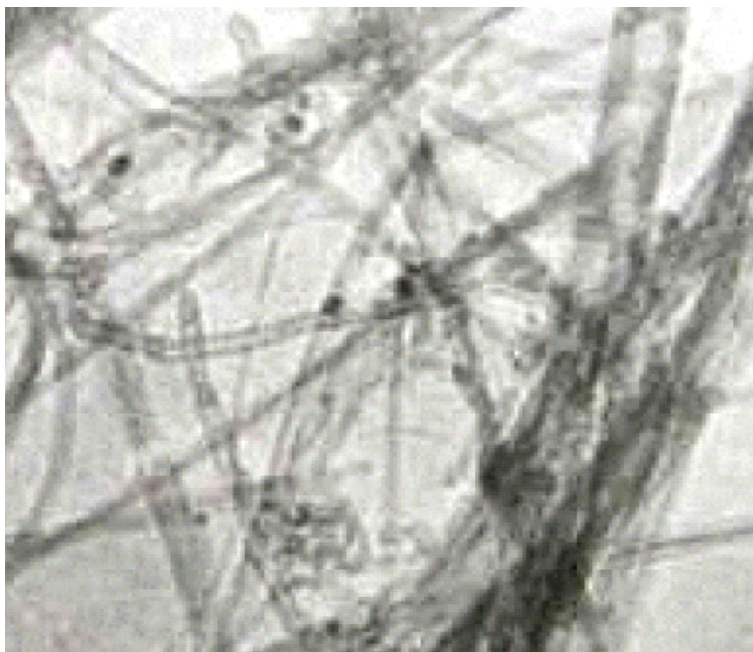
Type B: Chemical Vapor Deposition (CVD) Method

2. Characterizations

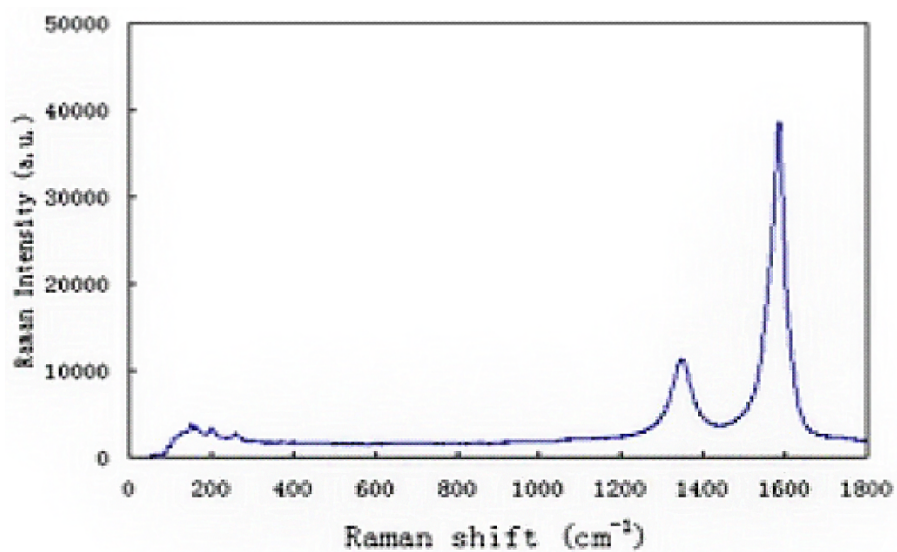
Type:	Type A	Type B
Purity:	>60%	>60%
Color:	Black	Black
Outer Diameter:	1-2 nm	1-2 nm
Inner Diameter:	0.8-1.6 nm	0.8-1.6 nm
Length:	1-3 μm	5-30 μm
Tap density:	NA	0.14g/cm ³
Apparent density:	NA	~2.1g/cm ³
SSA:	>400m ² /g	>407m ² /g
EC:	>100 S/cm	>100 S/cm



TEM Image of ACS Material Industrial SWNTs (Length = 1-3 μm)



TEM Image of ACS Material Industrial SWNTs (Length = 5-30 μm)



Raman Spectrum of ACS Material Industrial SWNTs (Length = 5-30 μm)

3. Application Fields

Catalysts, additives in polymers, nanoelectrodes, drug delivery, sensors, electromagnetic-wave absorption and shielding, electron field emitters for cathode ray lighting elements, flat panel display, gas-discharge tubes in telecom networks, energy conversion, lithium-battery anodes, hydrogen storage, supercapacitors, nanotube composites (by filling or coating), nanoprobe for STM, AFM, and EFM tips, nanolithography, reinforcements in composites, *etc.*

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