

Technical Data Sheet

ACS Material Highly Purified Hydroxylate Single-Walled Carbon Nanotubes (SWCNTs-OH)

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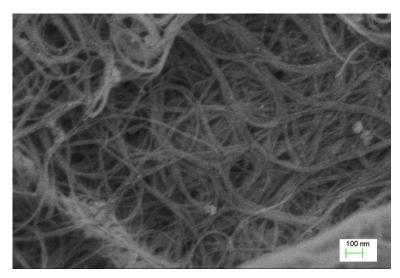
Revision: 090617

1. Preparation Method

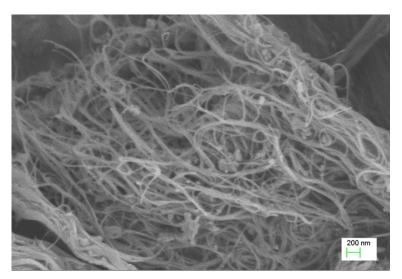
Floating Catalyst Method

2. Characterizations

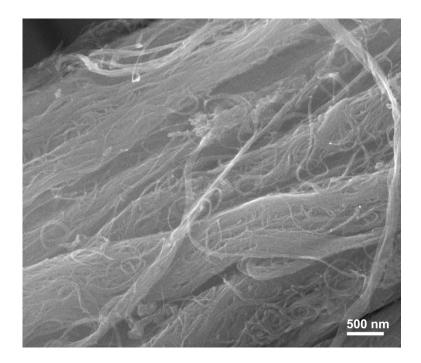
Type:	Type A	Type B
Purity:	>95%	>95%
Color:	Black	Black
Outer Diameter:	1-2 nm	1-2 nm
Inner Diameter:	0.8-1.6 nm	0.8-1.6 nm
Length:	1-3 μm	5-30 μm
EC:	>100 S/cm	>100 S/cm



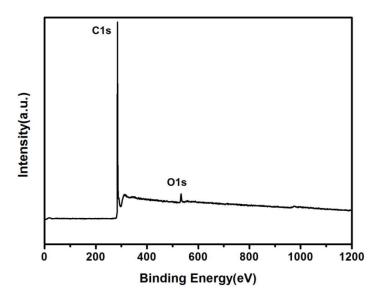
SEM Image of ACS Material Highly Purified SWCNTs-OH (Type A: Length = $1-3 \mu m$)



SEM Image of ACS Material Highly Purified SWCNTs-OH (Type A: Length = $1-3 \mu m$)



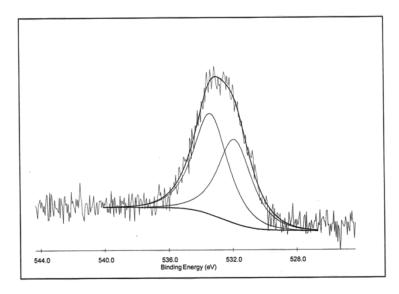
SEM Image of ACS Material Highly Purified SWCNTs-OH (Type B: Length = $5-30 \mu m$)



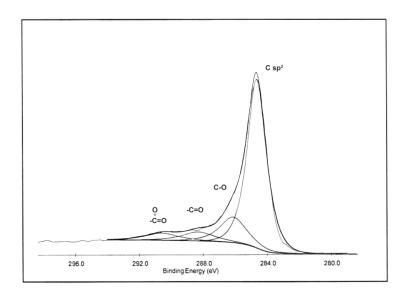
XPS Spectrum of ACS Material Highly Purified SWCNTs-OH (Type A: Length = 1-3 μm)

Table of Element Content (Type A: Length = $1-3 \mu m$)

Components	Area(CPS)	Atomic %
С	253072.89	96.41
О	23625.85	3.59



XPS O1s Spectrum of ACS Material Highly Purified SWCNTs-OH (Type B: Length = $5-30 \mu m$)



XPS C1s Spectrum of ACS Material Highly Purified SWCNTs-OH (Type B: 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), nanoprobes for STM, AFM, and EFM tips, nanolithography, reinforcements in composites, *etc*.

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