



Technical Data Sheet

ACS Material Purified Multi-Walled Carbon Nanotubes (MWNTs, 8-15 nm)

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Contact Information:

Manufacturer: ACS Material, LLC.

Address: 959 E Walnut St., Suite 100,

Pasadena, CA 91106, USA

Phone: (866)-227-0656

Fax: (781)-518-0284

E-Mail: contact@acsmaterial.com

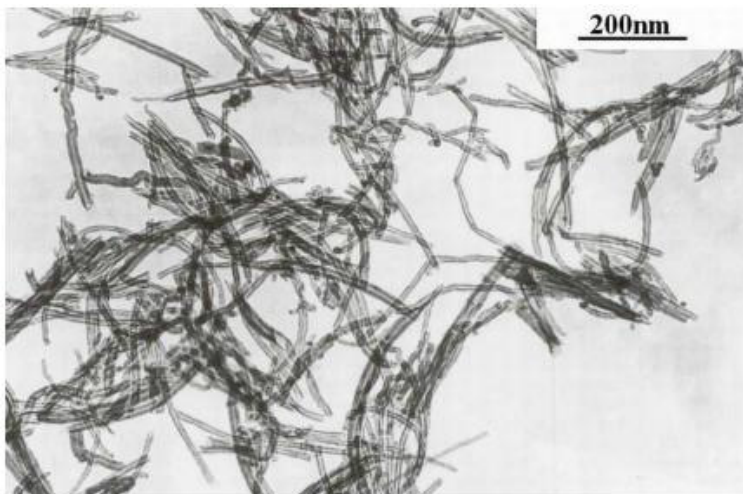
Revision: 111417

1. Preparation Method

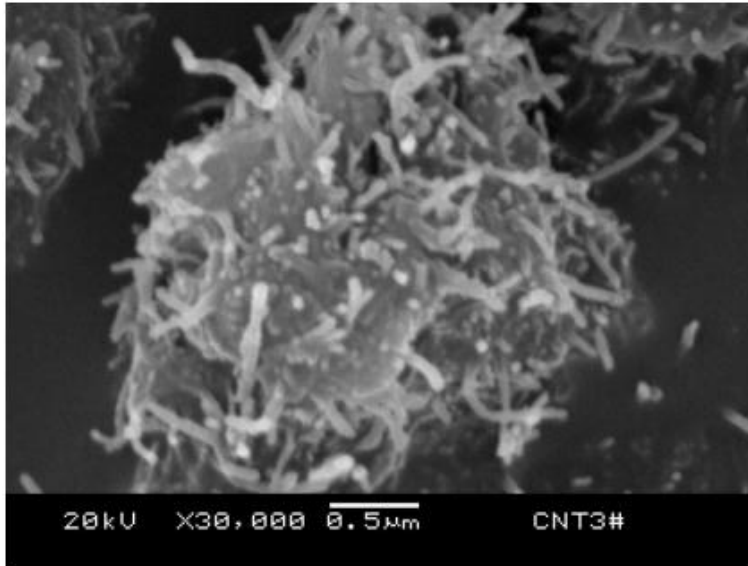
Chemical Vapor Deposition (CVD) Method

2. Characterizations

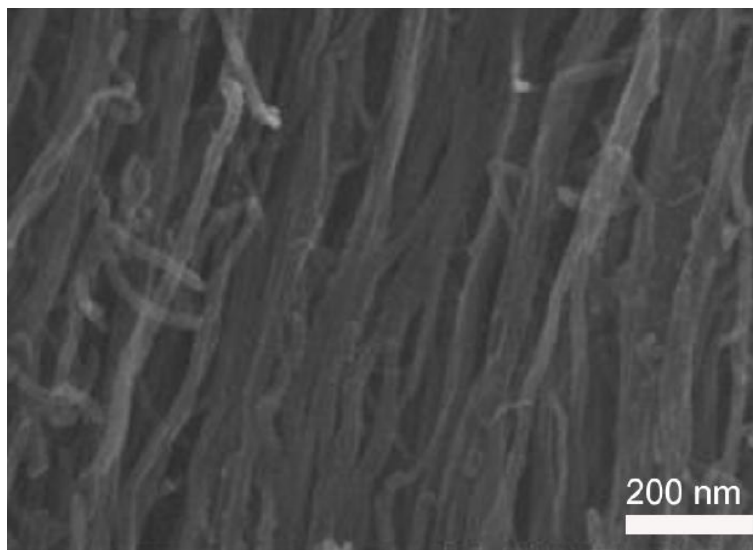
Purity:	>95%	>95%
Color:	Black	Black
Outer Diameter:	8-15 nm	8-15 nm
Inner Diameter:	3-5 nm	3-5 nm
Length:	0.5-2 μm	$\sim 50 \mu\text{m}$
SSA:	>233 m^2/g	>140 m^2/g
Tap Density:	0.15 g/cm^3	0.15 g/cm^3
True Density:	$\sim 2.1 \text{g}/\text{cm}^3$	$\sim 2.1 \text{g}/\text{cm}^3$
EC:	>100 S/cm	>100 S/cm



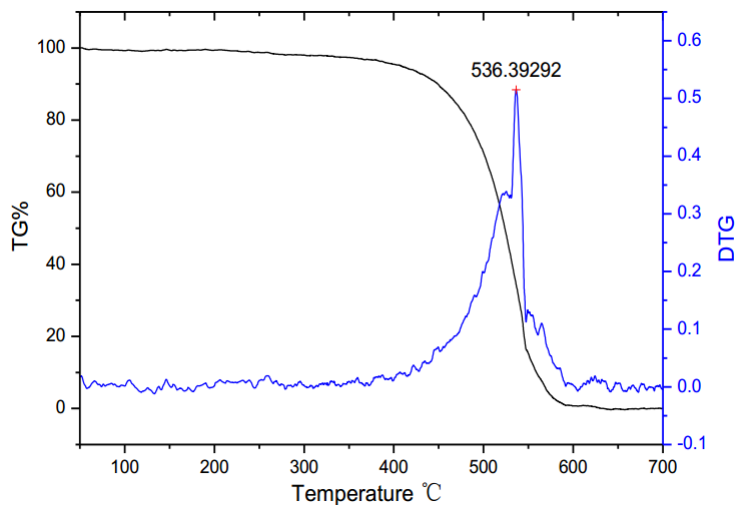
TEM Image of ACS Material Purified MWNTs (Length = 0.5-2 μm)



SEM Image of ACS Material Purified MWNTs (Length = 0.5-2 µm)



TEM Image of ACS Material Purified MWNTs (Length = ~50 µm)



TG Curve of ACS Material Purified MWNTs (Length = 0.5-2 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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