



Technical Data Sheet

ACS Material Purified Carboxylic Multi-Walled Carbon Nanotubes (MWNTs-COOH, >50 nm)

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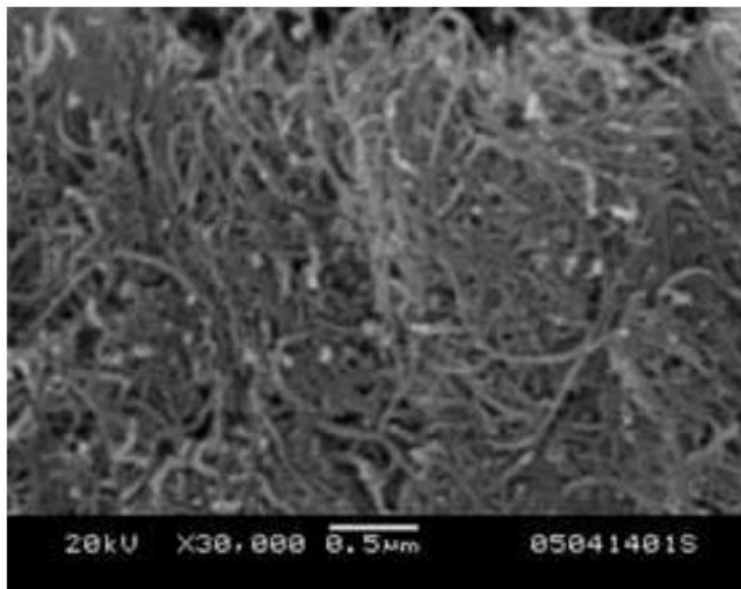
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1. Preparation Method

Chemical Vapor Deposition (CVD) Method

2. Characterizations

Purity:	>95%
-COOH Content:	0.49 wt.%
Color:	Black
Outer Diameter:	>50 nm
Inner Diameter:	5-15 nm
Length:	<10 μm
SSA:	>40 m^2/g
Tap Density:	0.18 g/cm^3
True Density:	$\sim 2.1 \text{ g}/\text{cm}^3$
EC:	>100 S/cm



SEM Image of ACS Material Purified MWNTs-COOH (Length <10 μm)



TEM Image of ACS Material Purified MWNTs-COOH (Length <math><10 \mu\text{m}</math>)

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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