



Technical Data Sheet

ACS Material Graphitized Carboxylic Multi-Walled Carbon Nanotubes (Graphitized MWNTs-COOH, 30-50 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

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1. Preparation Method

Chemical Vapor Deposition (CVD) method, at 2800°C to preparation

2. Characterizations

Purity:	>99.9%
-COOH Content:	0.36 wt.%
Color:	Black
Outer Diameter:	30-50 nm
Inner Diameter:	5-12 nm
Length:	<10 μm
SSA:	>100 m^2/g
Tap Density:	0.22 g/cm^3
True Density:	$\sim 2.1 \text{ g}/\text{cm}^3$
EC:	>100 S/cm

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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