



## Technical Data Sheet

### ACS Material Ni-Coated Multi-Walled Carbon Nanotubes (Ni Coated MWNTs, 30-50 nm)

#### Table of Contents

---

[1 – Preparation Method](#)

---

[2 – Characterizations](#)

---

[3 – Application Fields](#)

---

#### **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](mailto:contact@acsmaterial.com)

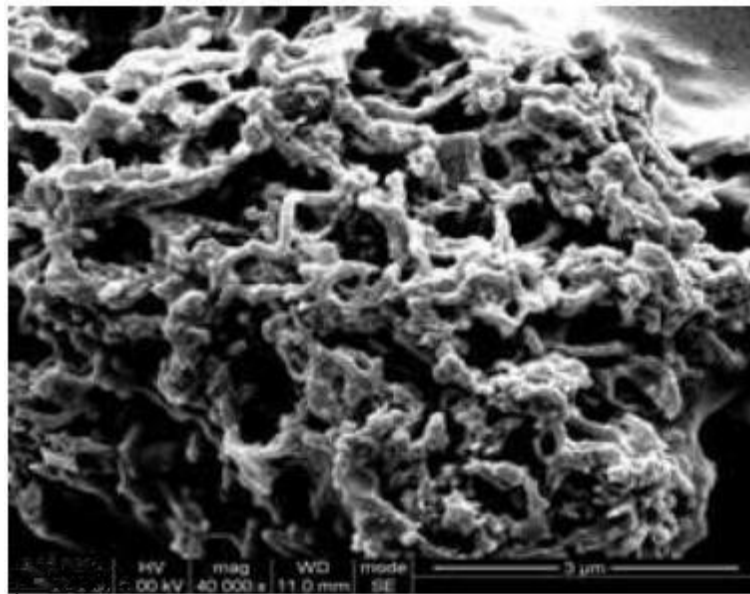
Revision: 010618

## 1. Preparation Method

Chemical Vapor Deposition (CVD) method

## 2. Characterizations

<b>Purity:</b>	>99.9%
<b>Color:</b>	Black
<b>CNTs Content:</b>	>38 wt.%
<b>Ni Content:</b>	>60 wt.%
<b>Outer Diameter:</b>	30-50 nm
<b>Inner Diameter:</b>	5-10 nm
<b>Length:</b>	<10 $\mu\text{m}$
<b>Tap Density:</b>	0.83 $\text{g}/\text{cm}^3$
<b>SSA:</b>	>50 $\text{m}^2/\text{g}$
<b>EC:</b>	N/A



SEM Image of ACS Material Ni-Coated MWNTs



TEM Image of ACS Material Ni-Coated MWNTs

### 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.*

**Disclaimer:** ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties either express or implied, regarding the suitability of the material for any purpose or the accuracy of the information contained within this document. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.