

# Specification Sheet

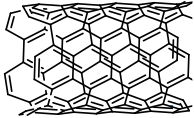


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## i-SWNT

**Product Description:** Industrial grade SWNTs purified by air oxidation and subsequently treated to remove the catalyst. The purified material closely approximates the pristine state with low functionality and low chemical doping.



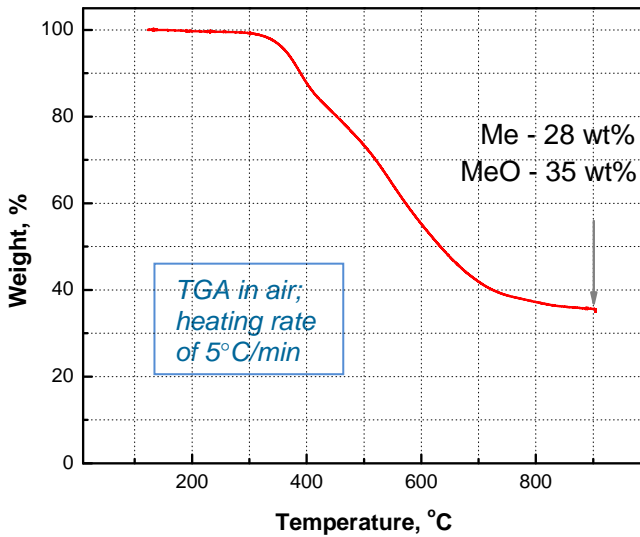
<b>Carbonaceous Purity*:</b>	> 45%
<b>Metal Content **:</b>	< 30%
<b>Typical Diameter of Individual SWNT:</b>	$1.55 \pm 0.1 \text{ nm}$
<b>Dispersibility in DMF***:</b>	0.1 mg/mL

\* Determined according to procedure described in *Nano Lett.* **2003**, 3, 309-314; and NIST Recommended Practice Guide "Measurement Issues in Single Wall Carbon Nanotubes": [http://www.nist.gov/customcf/get\\_pdf.cfm?pub\\_id=852726](http://www.nist.gov/customcf/get_pdf.cfm?pub_id=852726)

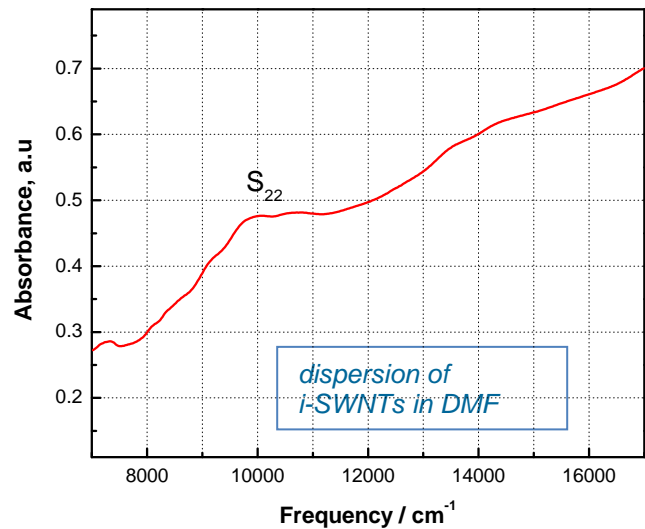
\*\* Weight % estimated from the residual of the thermal gravimetric analysis (TGA) in air at 900°C, corrected for metal oxide.

\*\*\* From solution phase NIR spectroscopy

### Thermogravimetric Analysis



### Near Infrared Spectroscopy



### Areas of applications:

- Thin film transparent conducting coating
- Separation of metallic and semiconducting SWNTs
- Nanostructured composites
- Nanoelectronics and Photonics
- Sensors
- Electromagnetic shielding