



## Certificate of Analysis

### Multi-Walled Carbon Nanotubes-Amine (MWNTs-NH<sub>2</sub>)

Purity of CNTs: +95%

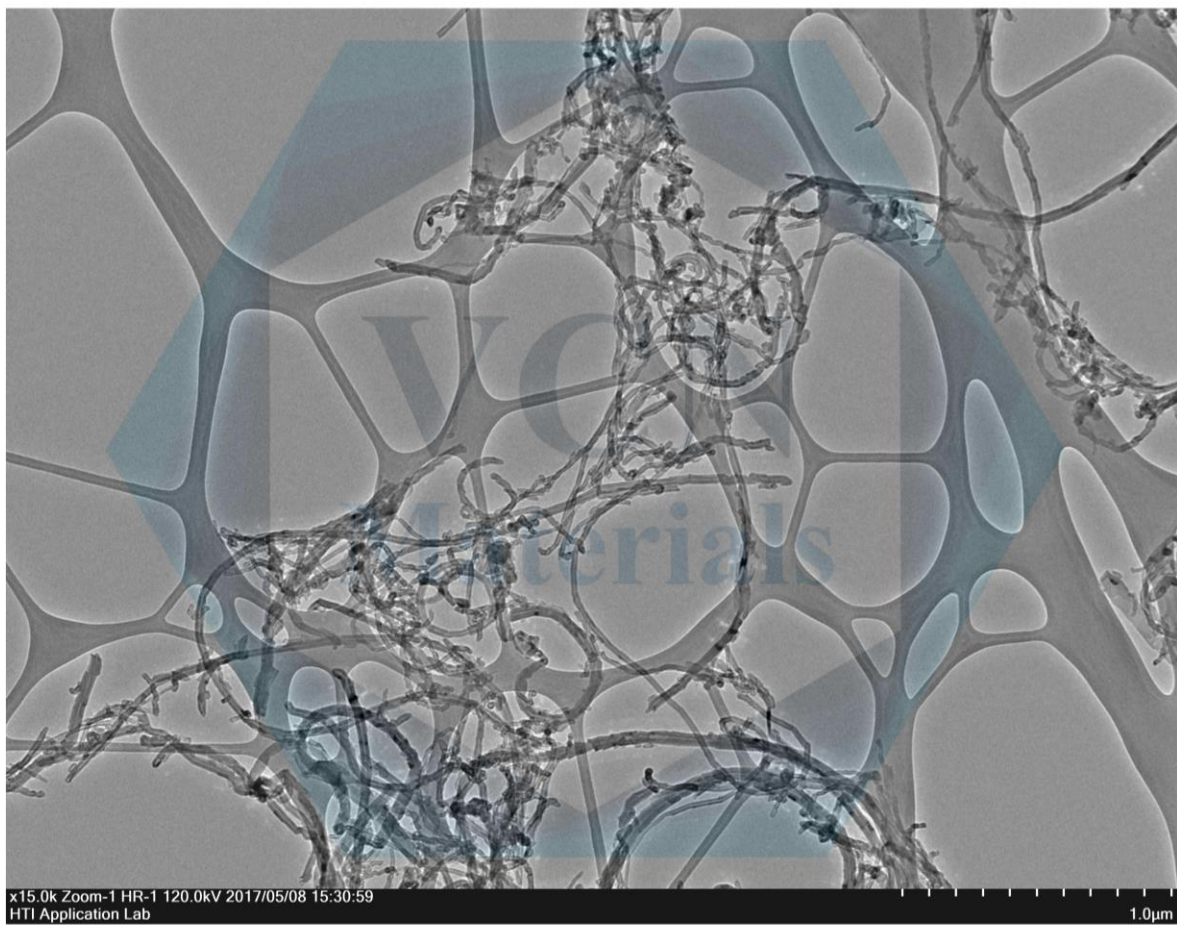
Diameter: 20-30nm

Regular Length: 5-10  $\mu\text{m}$

SSA: more than 200  $\text{m}^2/\text{g}$

Density: 2.1  $\text{g}/\text{cm}^3$

#### i. Morphological analysis

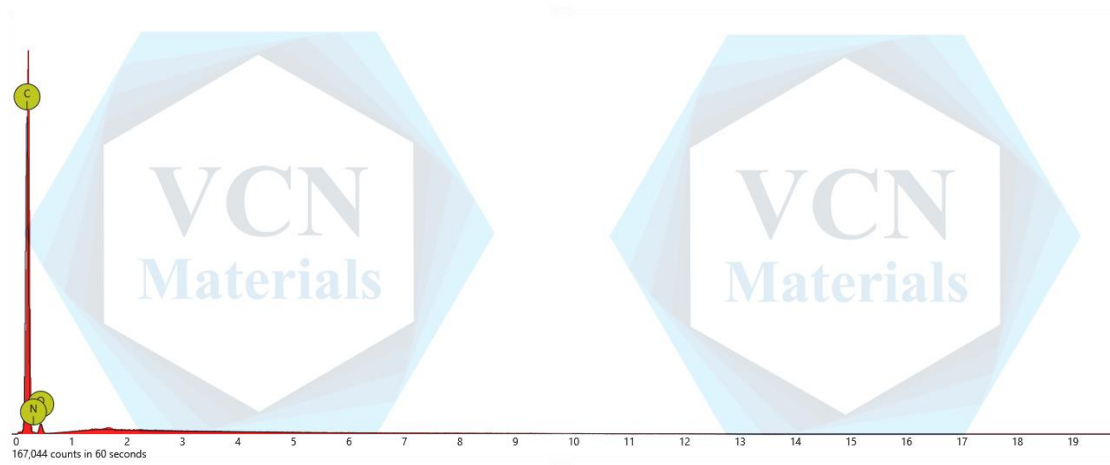


High resolution transmission electron microscopy image of Multi-Walled Carbon Nanotubes-Amine



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## ii. Elemental Analysis



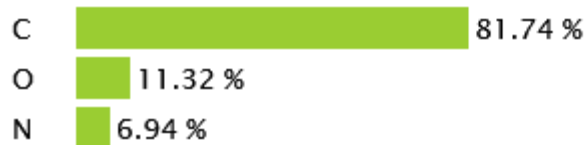
EDX image of Multi-Walled Carbon Nanotubes-Amine

Element Number	Element Symbol	Element Name	Atomic Conc.	Weight Conc.
6	C	Carbon	84.98	81.74
8	O	Oxygen	8.83	11.32
7	N	Nitrogen	6.19	6.94

### Atomic percentage



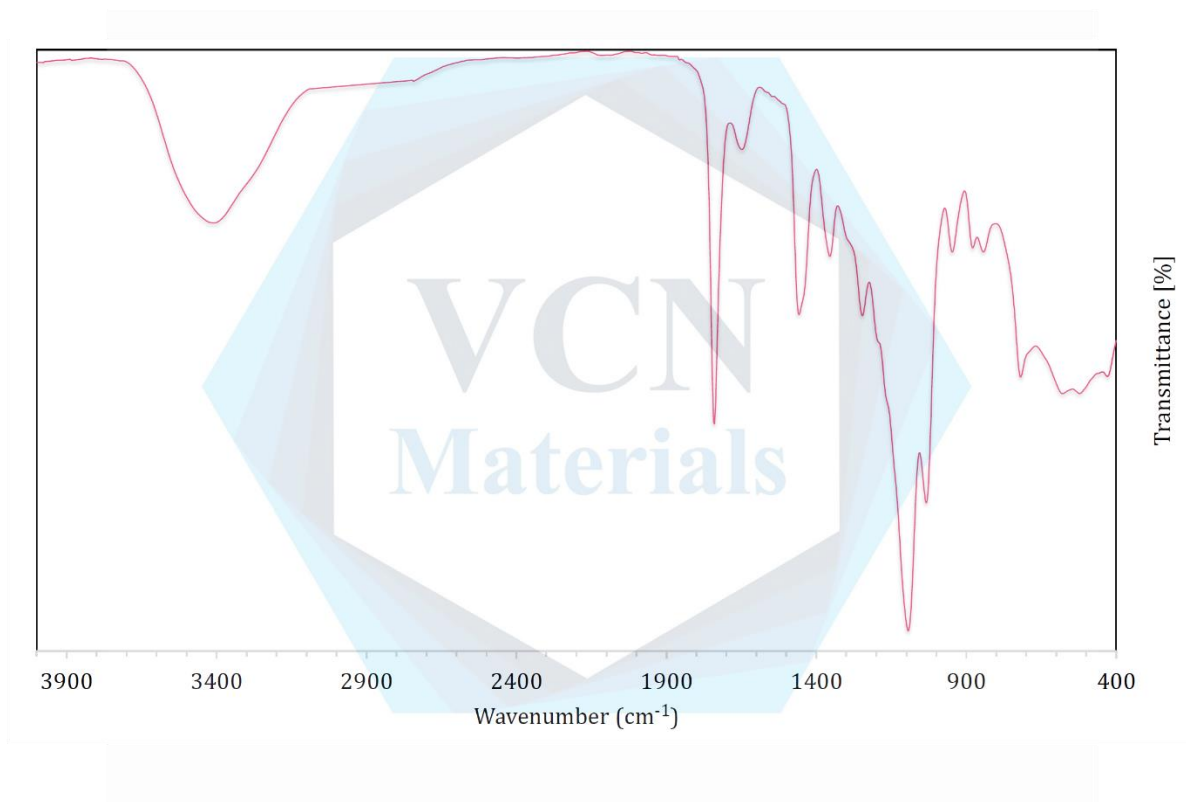
### Weight percentage





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## iii. Functional Analysis

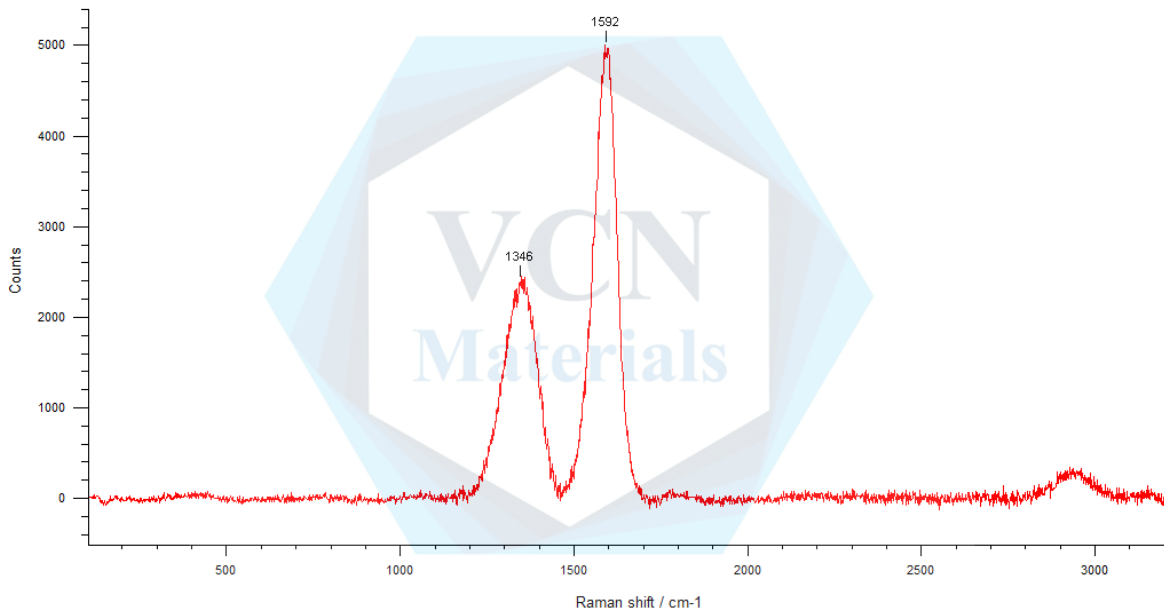


FTIR spectra of Multi-Walled Carbon Nanotubes-Amine



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## iv. Structural Analysis



**Raman spectra of Multi-Walled Carbon Nanotubes-Amine**