TECHNICAL DATA SHEET

Helical Multi-Walled Carbon Nanotube Powder

Product code: 030109 (Product ID 640)

Revision 2026-10

Description

Helical multi-walled carbon nanotubes (MWCNTs) made by CCVD, purified and functionalized with concentrated acid chemistry. About 80 wt% of the tubes are helical and the total CNT content is above 90 wt%; most tubes are 100-200 nm in outer diameter. Prices are per gram.

Specifications

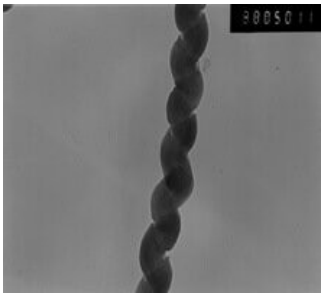
Property	Helical MWCNTs
SKU	030109
Product ID	640
Form	Powder
Outer diameter (nm)	100-200
Length (µm)	1-10
Purity (wt%)	>90
Helical content (wt%)	~80 (rest regular CNTs)
Specific surface area (m^2/g)	>30
Ash (wt%)	<5
Ignition temperature (C)	560-600
Inside diameter, electrical conductivity, density	[not specified]
Characterization	Ignition temperature 560-600 C (as listed on the product page; method not stated); ash <5 wt%; helical content ~80 wt%; TEM micrograph on product page (below). Raman IG/ID and TGA residue: not published.

Ash is listed on the product page as a percent and is shown here as wt%. Appearance and color are not published.

Grade Selection

- **Helical MWCNTs (030109):** coiled morphology, 100-200 nm outer diameter and 1-10 µm length, a much larger diameter and shorter length than the straight-tube grades. For straight tubes in the 8 to 80 nm range, see the Standard, COOH, OH, Short and Graphitized TDS documents.

Representative Data



TEM, helical MWCNT (030109, ID 640). No scale bar on the source image.

Micrographs are the images published on the cheaptubes.com product pages; instrument and imaging conditions are not stated. Source image is small (220 x 200 px).

Raman (IG/ID) and TGA (onset, residue) data are not published on the product page. Application data are not published; request details at sales@cheaptubes.com.

Storage and Handling

Store sealed, dry, at room temperature. Use local exhaust ventilation and respiratory protection when handling dry powder; see SDS. Disperse with surfactant (PVP, SDS or SDBS for aqueous systems) and high-shear mixing or sonication; oxygen-bearing groups aid wetting in water but do not make the powder water soluble.

Documentation

Values are representative of typical production and do not constitute a lot-specific guarantee. A lot-specific Certificate of Analysis (CoA) ships with each order.

Safety Data Sheet available at cheaptubes.com/nanomaterial-msds-safety-sheets.

Application results depend on formulation, equipment and process conditions; confirm with your own trials. Specifications reflect the product pages at cheaptubes.com as of October 2026. Entries marked [not specified] are not published for that grade; contact sales@cheaptubes.com.