TECHNICAL DATA SHEET

Technical Data Sheet: COOH Functionalized Graphitized Multi Walled Carbon Nanotubes 10-20nm

Product code: 050303

Revision 2026-11

Description

Graphitized multi-walled carbon nanotubes (MWCNT) produced by CCVD and graphitized at 2800 C, then COOH functionalized by acid treatment. Conductivity is very close to that of graphite powder and ash is below 0.1 wt%, at the cost of lower specific surface area than non-graphitized MWCNTs of similar size.

Specifications

Property	Value
Outer diameter	10-20nm
Inner diameter	3-5nm
Length	10-30um
Specific surface area	100 m2/g
Purity	>99.9 wt%
Ash	<0.1 wt%
Electrical conductivity	>100 S/cm
True density	~2.1 g/cm3

Characterization

Representative TEM image of this grade is shown below. Ash (residue) is below 0.1 wt% and graphitization temperature is 2800 C. A representative Certificate of Analysis is available.



TEM, representative

Applications

Suited to applications where overall conductivity matters more than the highest specific surface area. The specific surface area of the graphitized grades is still higher than that of other carbon additives, and conductivity is considerably higher. COOH groups provide a functionalized surface on the graphitized structure.

Storage and Handling

Store sealed, dry, at room temperature. Use respiratory protection when handling dry powder; see SDS.

Documentation

Representative data provided. A representative Certificate of Analysis is available. Safety Data Sheet 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 page at cheaptubes.com as of November 2026.