

## Certificate of Analysis

Date of Testing: 2023-09-19 14:38:16  
Date of Next Testing: 2027-09-18 14:38:16  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: 12313015  
SKU #: **C493463**  
Analysis: **279735**

Parameter	Limit Values	Result
Ash	0-3 (%)	1.95 %
Specific Surface Area	140-160 (m <sup>2</sup> /g)	150.00 m <sup>2</sup> /g
Length	20-100 (μm)	51.00 μm
Outer Diameter	10-20 (nm)	15.00 nm
Purity(TGA)	95-100 (%)	96.00000 %
Appearance(Black powder)	pass	Pass



John Su  
QA & QC Manager