

## Certificate of Analysis

Date of Testing: 2023-09-15 10:24:15  
Date of Next Testing: 2027-09-14 10:24:15  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: 12312079  
SKU #: **C493295**  
**Analysis: 277066**

Parameter	Limit Values	Result
Length	10-50 ( $\mu\text{m}$ )	11.60 $\mu\text{m}$
Outer Diameter	8-15 (nm)	8.36 nm
Specific Surface Area	$\geq 117$ ( $\text{m}^2/\text{g}$ )	118.20 $\text{m}^2/\text{g}$
Purity(TGA)	99.9-100 (%)	99.90000 %
-OH Content	1.8-1.9 (%)	1.85000 %
Appearance(Black powder)	pass	Pass



John Su  
QA & QC Manager