

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-08-31 17:31:45  
Date of Next Testing: 2027-08-30 17:31:45  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: H2328141  
SKU #: **C493326**  
Analysis: **270183**

Parameter	Limit Values	Result
Outer Diameter	30-80 (nm)	74.00 nm
Purity(TGA)	99.9-100 (%)	99.90000 %
Length	<10 ( $\mu\text{m}$ )	9.10 $\mu\text{m}$
Specific surface area (BET)	>50 ( $\text{m}^2/\text{g}$ )	52.00 $\text{m}^2/\text{g}$
Ash	<0.1 (%)	0.09 %
-COOH Content	0.20-0.3 (%)	0.25000 %
Appearance(Black powder)	pass	Pass



John Su  
QA & QC Manager