

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-09-20 09:40:08  
Date of Next Testing: 2027-09-19 09:40:08  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: 12313009  
SKU #: **C493460**  
Analysis: **278940**

Parameter	Limit Values	Result
-COOH Content	1.45-1.65 (%)	1.51000 %
Outer Diameter	10-30 (nm)	12.30 nm
Purity(TGA)	95-100 (%)	95.00000 %
Specific Surface Area	> 110 (m <sup>2</sup> /g)	112.60 m <sup>2</sup> /g
Length	10-30 (μm)	14.20 μm
Ash	0-5 (%)	4.82 %
Appearance(Black powder)	pass	Pass



John Su  
QA & QC Manager