

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-11-01 09:32:40  
Date of Next Testing: 2027-10-31 09:32:40  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: J2320309  
SKU #: **C493454**  
**Analysis: 291339**

Parameter	Limit Values	Result
Purity(TGA)	95-100 (%)	95.00000 %
Outer Diameter	20-40 (nm)	30.00 nm
-OH Content	1.55-1.65 (%)	1.62000 %
Length	10-30 ( $\mu\text{m}$ )	20.00 $\mu\text{m}$
Specific Surface Area	$\geq 80$ (m <sup>2</sup> /g)	80.20 m <sup>2</sup> /g
Ash	0-5 (%)	0.20 %
Appearance(Black powder)	pass	Pass



John Su  
QA & QC Manager