

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-11-26 13:12:47

Date of Next Testing: 2026-11-25 13:12:47

Product Name: **Carbon nanotube, multi-walled**

CAS Number: 308068-56-6

Specifications & Purity: Outer diameter: 8-15nm, length: 30-50  $\mu$  m

Lot #: K2216475

SKU #: **C491701**

Analysis: **160135**

| Parameter             | Limit Values                | Result                   |
|-----------------------|-----------------------------|--------------------------|
| Ash                   | 0-2 (%)                     | 1.90 %                   |
| Outer Diameter        | 8-15 (nm)                   | 12.00 nm                 |
| Length                | 30-50 ( $\mu$ m)            | 45.00 $\mu$ m            |
| Specific Surface Area | 200-250 (m <sup>2</sup> /g) | 210.00 m <sup>2</sup> /g |
| Purity(ICP)           | 98-100 (%)                  | 98.10 %                  |

A handwritten signature in black ink that reads "John Su".

John Su  
QA & QC Manager