

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-09-28 11:33:48  
Date of Next Testing: 2027-09-27 11:33:48  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: 12320402  
SKU #: **C493295**  
**Analysis: 263316**

| Parameter                | Limit Values                     | Result                      |
|--------------------------|----------------------------------|-----------------------------|
| Length                   | 5-30 ( $\mu\text{m}$ )           | 6.20 $\mu\text{m}$          |
| Outer Diameter           | 10-20 (nm)                       | 15.20 nm                    |
| Purity(ICP)              | 99.9-100 (%)                     | 100.00 %                    |
| Specific Surface Area    | 80-100 ( $\text{m}^2/\text{g}$ ) | 85.00 $\text{m}^2/\text{g}$ |
| -OH Content              | 1.45-1.60 (%)                    | 1.45100 %                   |
| Appearance(Black powder) | pass                             | Pass                        |



John Su  
QA & QC Manager