

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-09-14 14:13:59
Date of Next Testing: 2027-09-13 14:13:59
Product Name: **Carbon nanotube, multi-walled**
CAS Number: 308068-56-6
Specifications & Purity:
Lot #: 12312111
SKU #: **C493324**
Analysis: **276589**

| Parameter | Limit Values | Result |
|-----------------------------|--------------------------------|------------------------------|
| Purity(TGA) | 98-100 (%) | 99.20000% |
| Outer Diameter | 30-50 (nm) | 32.60 nm |
| Length | 0.5-2 (μm) | 0.73 μm |
| Specific surface area (BET) | > 90 (m^2/g) | 113.50 m^2/g |
| Ash | < 1.5 (%) | 1.38% |
| -COOH Content | 0.65-0.80 (%) | 0.73000% |
| Appearance(Black powder) | pass | Pass |



John Su
QA & QC Manager