

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-09-14 09:13:03  
Date of Next Testing: 2027-09-13 09:13:03  
Product Name: **Carboxylated single-walled carbon nanotubes**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: 12312200  
SKU #: **C493339**  
Analysis: **276121**

Parameter	Limit Values	Result
Purity(ICP)	>90 (%)	90.30 %
Outer Diameter	1-2 (nm)	1.30 nm
Length	1-3 ( $\mu\text{m}$ )	2.20 $\mu\text{m}$
Specific Surface Area	>380 ( $\text{m}^2/\text{g}$ )	385.00 $\text{m}^2/\text{g}$
Ash	< 5 (%)	4.80 %
-COOH Content	2.63-2.83 (%)	2.73000 %



John Su  
QA & QC Manager