

## Certificate of Analysis

Date of Testing: 2023-11-24 13:05:41  
Date of Next Testing: 2027-11-23 13:05:41  
Product Name: **Carbon nanotube, multi-walled**  
CAS Number: 308068-56-6  
Specifications & Purity:  
Lot #: K2320190  
SKU #: **C493314**  
Analysis: **277127**

| Parameter             | Limit Values                | Result                   |
|-----------------------|-----------------------------|--------------------------|
| Purity(TGA)           | 90-100 (%)                  | 92.00000 %               |
| Outer Diameter        | 10-20 (nm)                  | 15.20 nm                 |
| Length                | <30 (μm)                    | 16.00 μm                 |
| Specific Surface Area | 230-280 (m <sup>2</sup> /g) | 255.00 m <sup>2</sup> /g |
| Appearance(color)     | Black                       | Black                    |



John Su  
QA & QC Manager