

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-01-29 15:25:45  
Date of Next Testing: 2027-01-28 15:25:45  
Product Name: **Indigo carmine**  
CAS Number: 860-22-0  
Specifications & Purity: 96% , indicator (pH 11.5-14.0)  
Lot #: A2312049  
SKU #: **I105009**  
**Analysis: 167173**

| Parameter                                               | Limit Values                                       | Result                                             |
|---------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| Loss on drying                                          | 0-10 (%)                                           | 3.32 %                                             |
| $\lambda$ max(H <sub>2</sub> O)                         | 603-613 (nm)                                       | 610.00 nm                                          |
| Purity(HPLC)                                            | 96-100 (%)                                         | 96.13000 %                                         |
| Appearance (I105009)                                    | Blue to Dark Blue and Purple to Dark Purple Powder | Blue to Dark Blue and Purple to Dark Purple Powder |
| PH Transition interval,11.5(blue) – PH 14.0(yellow)     | Conforms                                           | Conforms                                           |
| Proton NMR spectrum                                     | Conforms to Structure                              | Conforms to Structure                              |
| Solubility in MeOH , Blue to very Deep Blue,0.01g/ 10ml | pass                                               | Pass                                               |



John Su  
QA & QC Manager