

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-03-24 01:54:45  
Date of Next Testing: 2027-03-23 01:54:45  
Product Name: **Fast Black K Salt hemi(zinc chloride) salt**  
CAS Number: 64071-86-9  
Specifications & Purity:  
Lot #: C23181093  
SKU #: **F113033**  
**Analysis: 181117**

Parameter	Limit Values	Result
Absorbance(E1%1cm)(H <sub>2</sub> O, 450.0 to 460.0 nm)	≥50	73.97
λ max 2 (H <sub>2</sub> O)	450-460 (nm)	460.00 nm
λ max 1 (H <sub>2</sub> O)	330-335 (nm)	335.00 nm
Absorbance(E1%1cm)(H <sub>2</sub> O, 330.0 to 335.0 nm)	≥110	110.11
Appearance (F113033)	Orange to Red to Brown Powder, Crystal, Crystalline Powder and/or Chunk	Orange to Red to Brown Powder, Crystal, Crystalline Powder and/or Chunk
ICP: Confirms Zinc Component	Confirmed	Confirmed
Solubility in H <sub>2</sub> O, Dark Red or Red-Brown Solution, 10mg/ml	pass	Pass
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Titration by AgNO <sub>3</sub>	Confirmed	Confirmed



John Su  
QA & QC Manager