

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-07-13 13:06:32  
 Date of Next Testing: 2027-07-12 13:06:32  
 Product Name: **Fast Black K Salt hemi(zinc chloride) salt**  
 CAS Number: 64071-86-9  
 Specifications & Purity:  
 Lot #: G2307228  
 SKU #: **F113033**  
**Analysis: 236526**

Parameter	Limit Values	Result
Absorbance(E1%1cm)(H2O, 450.0 to 460.0 nm)	≥50	156.83
Absorbance(E1%1cm)(H2O, 330.0 to 335.0 nm)	≥110	308.23
λ max 2 (H2O)	450-460 (nm)	460.00 nm
λ max 1 (H2O)	330-335 (nm)	335.00 nm
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 H2O, Dark Red or Red-Brown Solution, 10mg/ml	pass	Pass
Titration by AgNO3	Confirmed	Confirmed
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager