

## Certificate of Analysis

Date of Testing: 2023-06-09 17:17:29  
Date of Next Testing: 2027-06-08 17:17:29  
Product Name: **Copper(II) phthalocyanine**  
CAS Number: 147-14-8  
Specifications & Purity: sublimed grade, 99 %  
Lot #: F23061394  
SKU #: **C123342**  
**Analysis:** **063794**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	19.2-19.9 (%)	19.36 %
Purity	99-100 (%)	99.50 %
Carbon by Elemental Analysis	65.7-68.4 (%)	66.38 %
Wavelength(c=0.005g/L;Chloronaphthalene)	675-681 (nm)	678.00 nm
Water by Karl Fischer	0-0.5 (%)	0.30 %
Extinction Coefficient	≥11000	12000.00
Appearance (C123342)	Purple Needles and/or Powder	Purple Needles and/or Powder
ICP: Confirms Cu Components	Confirmed	Confirmed
Infrared spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager