

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing:	2023-05-30 15:07:37
Date of Next Testing:	2027-05-29 15:07:37
Product Name:	<b>Tris(2,2'-bipyridine)dichlororuthenium(II) hexahydrate</b>
CAS Number:	50525-27-4
Specifications & Purity:	98%
Lot #:	E2324696
SKU #	<b>T113540</b>
<b>Analysis:</b>	<b>212434</b>
Storage Temperature:	Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	45.7-50.5 (%)	48.77 %
Nitrogen by Elemental Analysis	10.7-11.8 (%)	11.44 %
Water by Karl Fischer	12-15 (%)	14.98 %
Appearance (T113540)	Red to Red-Orange to Orange Powder or Crystals	Red to Red-Orange to Orange Powder or Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , Clear to Slightly Hazy, Orange to Red, 1%	pass	Pass
ICP: Confirms Ruthenium Component	Confirmed	Confirmed



John Su  
QA & QC Manager