

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-07-19 11:26:54  
 Date of Next Testing: 2029-07-18 11:26:54  
 Product Name: **Tris(2,2'-bipyridine)dichlororuthenium(II) hexahydrate**  
 CAS Number: 50525-27-4  
 Specifications & Purity: ≥98%  
 Lot #: G2511741  
 SKU #: **T113540**  
 Version: **1**  
 Analysis #: **533432**  
 Storage Temperature: Protected from light, Room temperature, Argon charged, Cool

| Parameter                                                                  | Limit Values                                   | Result                                         |
|----------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Carbon by Elemental Analysis                                               | 45.7-50.5 (%)                                  | 48.69200 %                                     |
| Nitrogen by Elemental Analysis                                             | 10.7-11.8 (%)                                  | 11.27400 %                                     |
| Water by Karl Fischer                                                      | 12-15 (%)                                      | 12.37200 %                                     |
| Appearance (T113540)                                                       | Red to Red-Orange to Orange Powder or Crystals | Red to Red-Orange to Orange Powder or Crystals |
| Solubility in H <sub>2</sub> O , Clear to Slightly Hazy, Orange to Red, 1% | pass                                           | Pass                                           |
| ICP: Confirms Ruthenium Component                                          | Confirmed                                      | Confirmed                                      |
| Infrared spectrum                                                          | Conforms to Structure                          | Conforms to Structure                          |



John Su  
QA & QC Manager