

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-07-03 15:42:08  
Date of Next Testing: 2026-07-02 15:42:08  
Product Name: **Rhodamine 110 chloride**  
CAS Number: 13558-31-1  
Specifications & Purity: laser grade,97%  
Lot #: F2230300  
SKU #: **R299349**  
**Analysis:** **055705**  
Storage Temperature: Protected from light,Store at -20°C

Parameter	Limit Values	Result
$\lambda$ max(c=10mg/l in mEtOH)	498-504 (nm)	502.00 nm
Molar absorption coeff( $\lambda$ max.)	$\geq 77000$ (L/cm.g)	78000.00 L/cm.g
Purity(HPLC)	97-100 (%)	99.00000 %
Appearance (R299349)	Red to Green to Dark Green Powder, Crystals	Red to Green to Dark Green Powder, Crystals
Infrared spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Suitability test(laser dye)	passes	passes



John Su  
QA & QC Manager