

## Certificate of Analysis

Date of Testing: 2023-07-04 10:45:19  
Date of Next Testing: 2027-07-03 10:45:19  
Product Name: **2,4-Difluorophenylhydrazine hydrochloride**  
CAS Number: 51523-79-6  
Specifications & Purity: 98%  
Lot #: F2313825  
SKU #: **D102569**  
Analysis: **247026**

Parameter	Limit Values	Result
Carbon by Elemental Analysis	38.5-41.3 (%)	39.66 %
Nitrogen by Elemental Analysis	15-16.1 (%)	15.50 %
Purity(Neutralization titration)	96.5-103.5 (%)	98.84 %
Appearance (D102569)	White to Light yellow to Light orange powder to crystal	White to Light yellow to Light orange powder to crystal
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility,Very faint turbidity(Methanol)	pass	Pass
Fluorine NMR Spectrum	Conforms to Structure	Conforms to Structure
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager