

## Certificate of Analysis

Date of Testing: 2023-05-05 16:15:10  
Date of Next Testing: 2025-05-04 16:15:10  
Product Name: **DL-Norepinephrine Hydrochloride**  
CAS Number: 55-27-6  
Specifications & Purity: 97%  
Lot #: D2324401  
SKU #: **D134211**  
**Analysis: 218221**  
Storage Temperature: Store at -20°C

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	6.5-7.1 (%)	6.87 %
Water by Karl Fischer	0-4.2 (%)	0.30 %
Carbon by Elemental Analysis	45.6-47.9 (%)	46.47 %
Purity(HPLC)	97-100 (%)	99.97000 %
Appearance (D134211)	Off-white to tan crystals,powder or chunks	Off-white to tan crystals,powder or chunks
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O , Faint Yellow to Yellow-Brown,Clearpass to Hazy,50mg/ml		Pass



John Su  
QA & QC Manager