

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-07-02 17:12:41  
Date of Next Testing: 2028-07-01 17:12:41  
Product Name: **Penicillic acid**  
CAS Number: 90-65-3  
Specifications & Purity:  $\geq 98\%$  (HPLC)  
Lot #: F2425357  
SKU #: **P137904**  
Version: **0**  
Analysis #: **365510**  
Storage Temperature: Store at  $-20^{\circ}\text{C}$ , Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.96000 %
Purity(TLC,ETOAc: Toluene: HCOOH 6 : 3 : 1)	99-100 (%)	99.12 %
Melting point	83-87 ( $^{\circ}\text{C}$ )	83.40000 $^{\circ}\text{C}$
Water by Karl Fischer	0-2 (%)	1.73 %
Carbon by Elemental Analysis	54.9-56.9 (%)	54.96 %
Purity(TLC,RP C18, MeOH : H2O 9 : 1)	99-100 (%)	99.20 %
Appearance (P137904)	White or light yellow powder	White or light yellow powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in $\text{CH}_2\text{CL}_2$ , Colorless ,Clear ,10mg/ml	pass	Pass
Solubility in $\text{H}_2\text{O}$ , Colorless,Clear,4.90 - 5.10 mg/ml	pass	Pass



John Su  
QA & QC Manager