

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2023-12-04 11:45:11
Date of Next Testing: 2027-12-03 11:45:11
Product Name: **Penicillic acid**
CAS Number: 90-65-3
Specifications & Purity: $\geq 98\%$ (HPLC)
Lot #: K2327386
SKU #: **P137904**
Analysis: 295055
Storage Temperature: Store at -20°C , Argon charged

Parameter	Limit Values	Result
Purity(HPLC)	98-100 (%)	99.97400 %
Purity(TLC,ETOAc: Toluene: HCOOH 6 : 3 : 1)	99-100 (%)	99.52 %
Purity(TLC,RP C18, MeOH : H2O 9 : 1)	99-100 (%)	99.62 %
Melting point	83-87 ($^{\circ}\text{C}$)	85.50000 $^{\circ}\text{C}$
Water by Karl Fischer	0-2 (%)	1.10 %
Carbon by Elemental Analysis	54.9-56.9 (%)	55.61 %
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (P137904)	White or light yellow powder	White or light yellow powder
Solubility in CH_2CL_2 , Colorless ,Clear ,10mg/ml	pass	Pass
Solubility in H_2O , Colorless,Clear,4.90 - 5.10 mg/ml	pass	Pass



John Su
QA & QC Manager