

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2026-06-12 11:32:02
 Date of Next Testing: 2028-06-11 11:32:02
 Product Name: **Piperacillin Sodium**
 CAS Number: 59703-84-3
 Specifications & Purity: $\geq 98\%$ (N)
 Lot #: F2609030
 SKU #: **P129602**
 Version: **0**
 Analysis #: **725213**
 Storage Temperature: Store at -20°C, Argon charged

Parameter	Limit Values	Result
Purity(with Total Nitrogen)(anhydrous)	98-100 (%)	99.60000 %
Purity(HPLC)	95-100 (%)	98.00000 %
Specific Rotation $[\alpha]_{20/D}(c=0.8 \text{ in H}_2\text{O})(\text{calcd. on anh. substance})$	170-190 (°)	184.20000 °
Water by Karl Fischer	0-5 (%)	1.45120 %
Appearance (P129602)	White to Off-White Powder or Crystals	White to Off-White Powder or Crystals
Proton NMR spectrum	Conforms to Structure	Conforms to Structure



John Su
QA & QC Manager