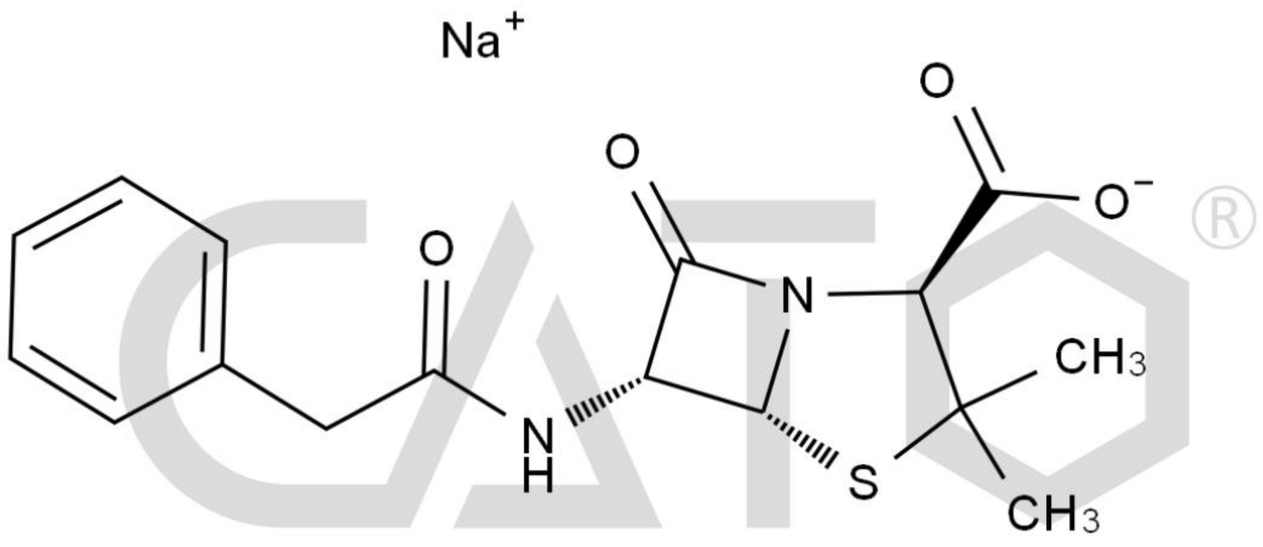
Certificate of Analysis

Reference Material & Standard

Product Name:	Penicillin G Sodium Salt	**Catalogue Number:**	CCHM700206
Synonyms:	N/A	**Lot Number:**	0509-RG-0052
CAS Number:	69-57-8	**Expiry Date:**	May 08, 2029
Molecular Formula:	$C_{16}H_{17}N_2O_4S$ Na	**Storage:**	Room Temp Protected from light and Sealed
Molecular Weight:	333.38 22.99	**Shipping Condition:**	Shipping at Room Temperature
		Warning:	

Chemical Structure:



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Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&CNMR&HNMR	Confirmed
Purity	HPLC	91.883%
Loss on Drying	TGA	0.0028%
Assay	Mass Balance	91.9%
Uncertainty		±1.5%

Comment:

1. The calculation of the mass balance method follows the formula (calculated on the non-dried basis):
*Assay (%) = (100%-Loss on Drying) * Purity HPLC (%) /100%*
Loss on Drying is considered as absolute effect, HPLC purity is considered as relative effect.
2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by: Lisa Date: Nov 09, 2026

Reviewed by: Hinlam Date: Nov 09, 2026

Approved by General Manager: David Date: Nov 09, 2026

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ANAB ANSI National Accreditation Board ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-2832

ISO 9001:2000 SYSTEM CERTIFICATION SGS

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