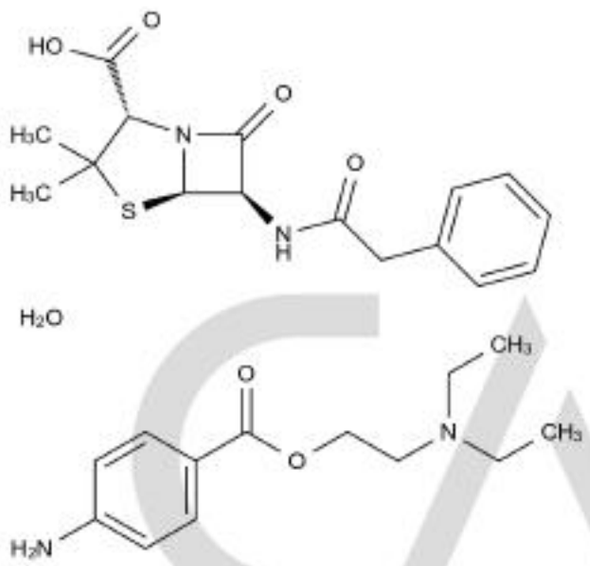
Certificate of Analysis

Reference Material & Standard

Product Name:	Penicillin G procaine hydrate	**Catalogue Number:**	CIM-105284
Synonyms:	N/A	**Lot Number:**	0412-SA-7706
CAS Number:	6130-64-9	**Expiry Date:**	Apr 12, 27
Molecular Formula:	$C_{16}H_{18}N_2O_4S$ $C_{13}H_{20}N_2O_2$ H_2O	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	334.39 236.31 18.02		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Solid
Identification:	LC&HNMR	Confirmed
Purity:	HPLC	97.860%
Uncertainty		±2.0%

Comment:

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: Apr 12, 25

Reviewed by: Yuki Date: Apr 12, 25

Approved by General Manager: David Date: Apr 12, 25

CATO Research Chemicals Inc.

Directions:

1. Intended use: This product is suitable for identification and quantification of the analyte(s), instrument calibration, method development and quality control in analytical and R&D applications. It is not intended for administration to humans or animals, and shall not be used to diagnose, treat or cure any diseases.

2. Minimum sample size: 1mg is recommended as the minimum sample size.

3. Metrological traceability: This product meets the requirements of ISO 17034 and is traceable to NMI through an unbroken chain of comparisons.

4. Instructions for handling and correct use: Handling in a well-ventilated place.

Document Version:

Revision No.	Date	Reason for Revision
01	Apr 12, 25	First release.

CATO Research Chemicals Inc.