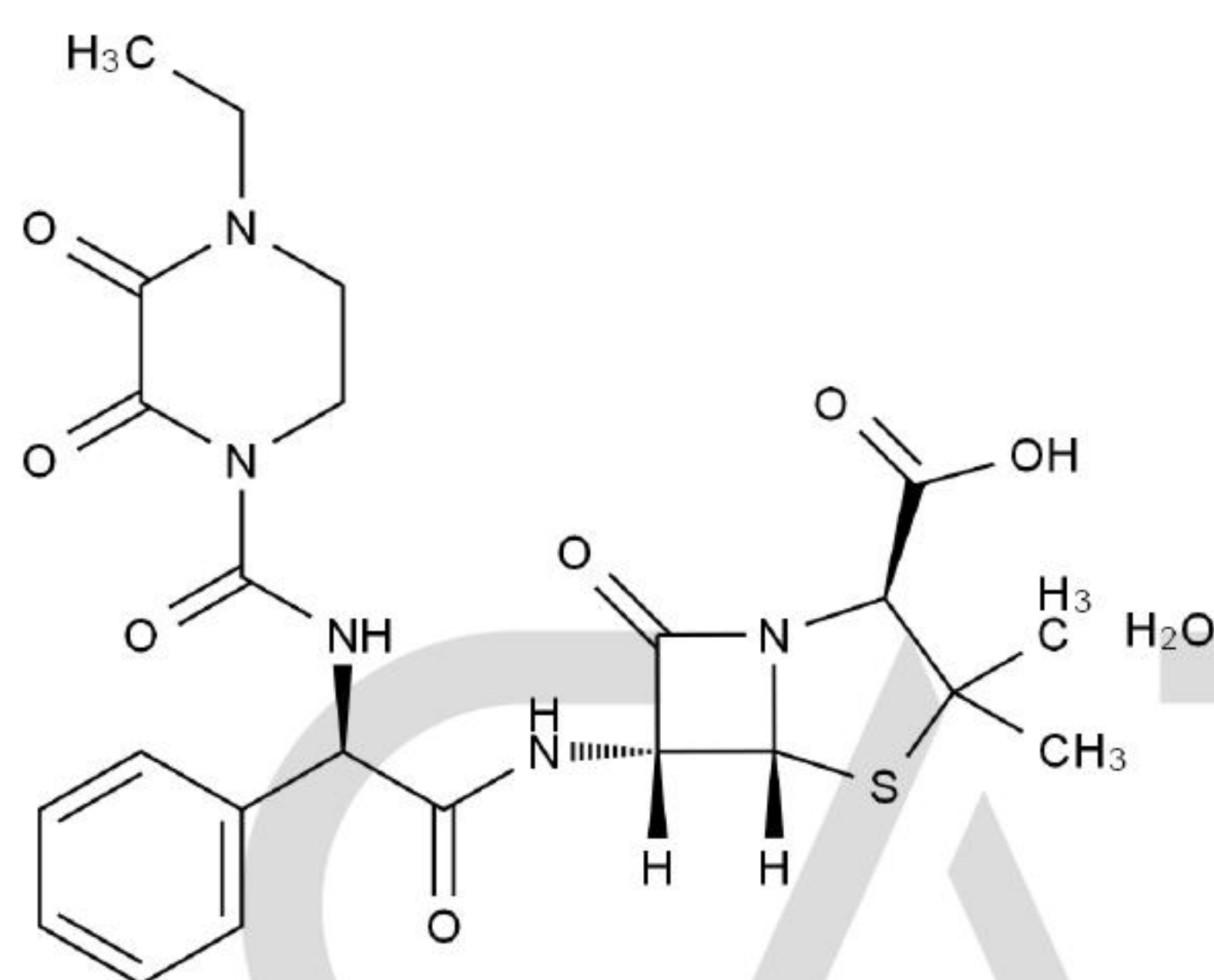


Certificate of Analysis

Reference Material & Standard

Product Name:	Piperacillin Monohydrate	Catalogue Number:	C4X-1732
Synonyms:	N/A	Lot Number:	0401-RG-0016
CAS Number:	66258-76-2	Expiry Date:	Apr 02, 2028
Molecular Formula:	C ₂₃ H ₂₇ N ₅ O ₇ S H ₂ O	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	517.55 18.02		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	99.457%
Residue on Ignition	TGA	0.3308%
Loss On Drying	TGA	4.2365%
Loss On Drying(Free Water)		0.8715%
Assay		98.3%

Comment:

1. The content of crystal water is 3.365%.
2. The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Residue on Ignition} - \text{Loss On Drying(Free Water)}) * \text{Purity HPLC (\%)} / 100\%$$
Residue on Ignition and Loss On Drying(Free Water) are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Nice

Reviewed by:

Koi

Approved by General Manager:

David

Date: Apr 03, 2025

Date: Apr 07, 2025

Date: Apr 07, 2025

