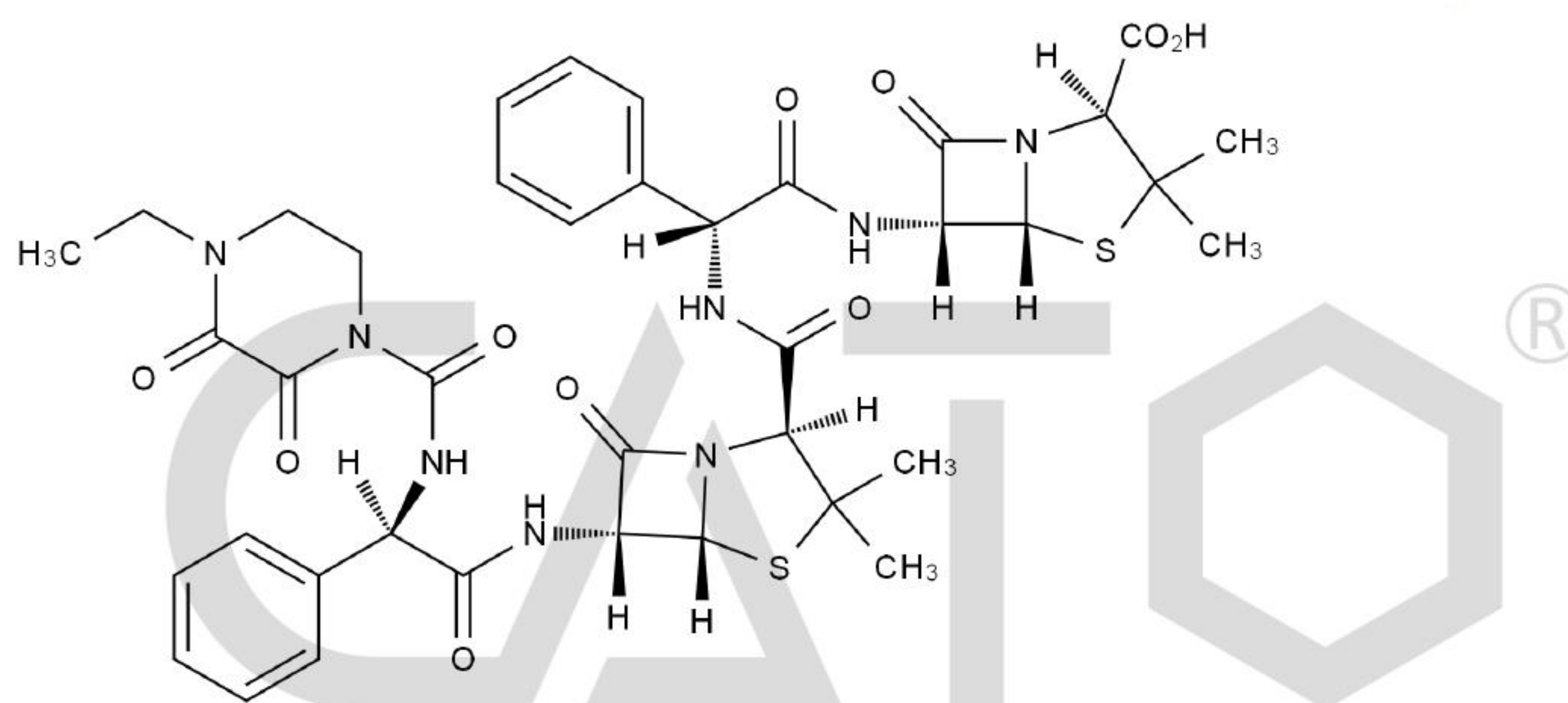


Certificate of Analysis

Reference Material & Standard

Product Name:	Piperacillin EP Impurity D	Catalogue Number:	C4X-173217
Synonyms:	Piperacillinyl ampicillin;N-Piperacillinyl Ampicillin	Lot Number:	0410-RG-0095
CAS Number:	65772-67-0	Expiry Date:	Apr 09, 2028
Molecular Formula:	C39H44N8O10S2	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	848.94	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Yellow Solid
Identification	LCMS&IR&UV&CNMR&HNMR	Confirmed
Purity	HPLC	94.808%
Residue on Ignition	TGA	1.5173%
Loss On Drying	TGA	2.1691%
Assay		91.3%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100%-Residue on Ignition-Loss On Drying) * Purity HPLC (%) / 100%

Residue on Ignition and Loss On Drying 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: Jul 29, 2025

Date: Jul 30, 2025

Date: Jul 30, 2025

