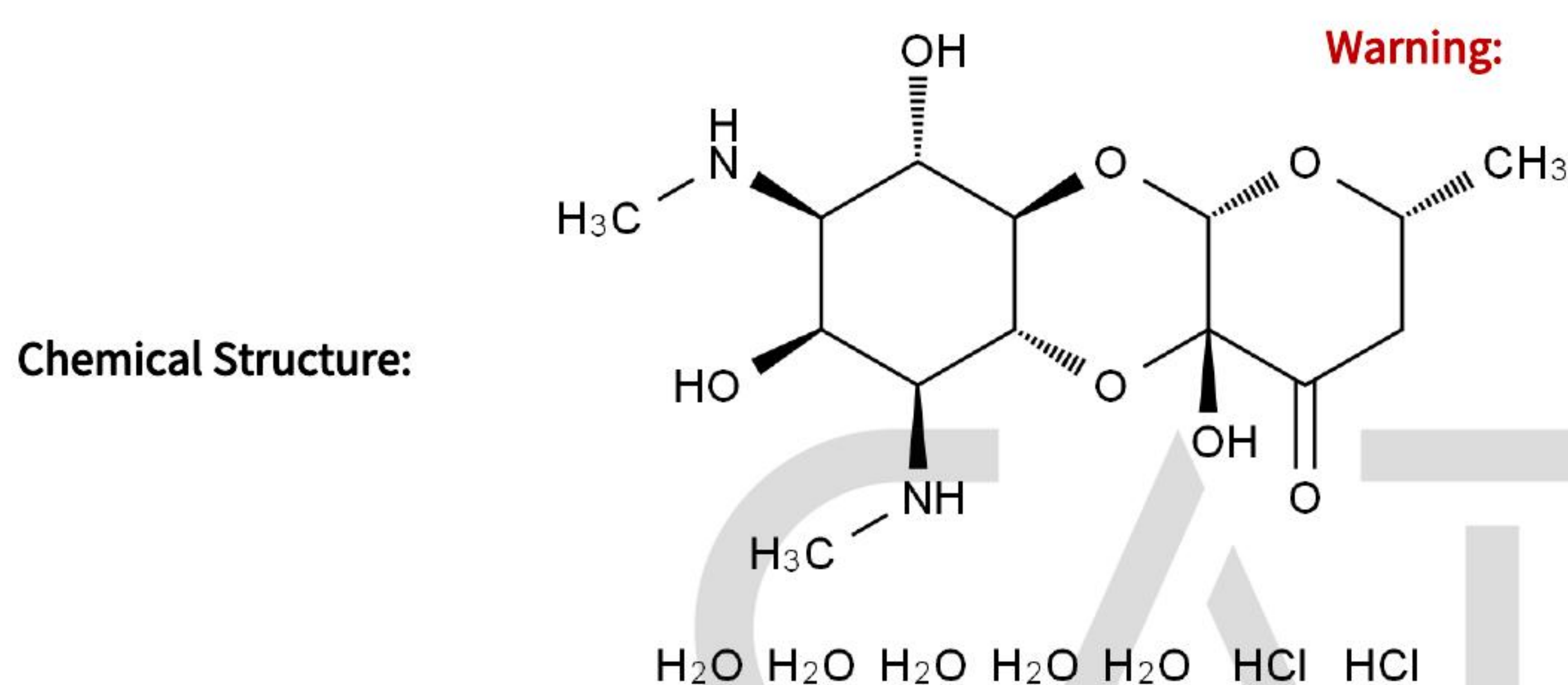


Certificate of Analysis

Reference Material & Standard

Product Name:	Spectinomycin Dihydrochloride Pentahydrate	Catalogue Number:	CCAD300419
Synonyms:	N/A	Lot Number:	0820-RH-0041
CAS Number:	22189-32-8	Expiry Date:	Aug 24, 2030
Molecular Formula:	C ₁₄ H ₂₄ N ₂ O ₇ 2*HCl 5*H ₂ O	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	332.35 2*36.46 5*18.02	Shipping Condition:	Shipping with Ice Packs



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	96.106%
Residue on Ignition	TGA	0.3690%
Loss on Drying	TGA	18.1967%
Loss on Drying(Free Water)		0.0083%
Assay		95.7%
Uncertainty		±0.7%

Comment:

- The content of crystal water is 18.1884%.
- The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

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

Nice

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Aug 25, 2026

Date: Aug 26, 2026

Date: Aug 26, 2026

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