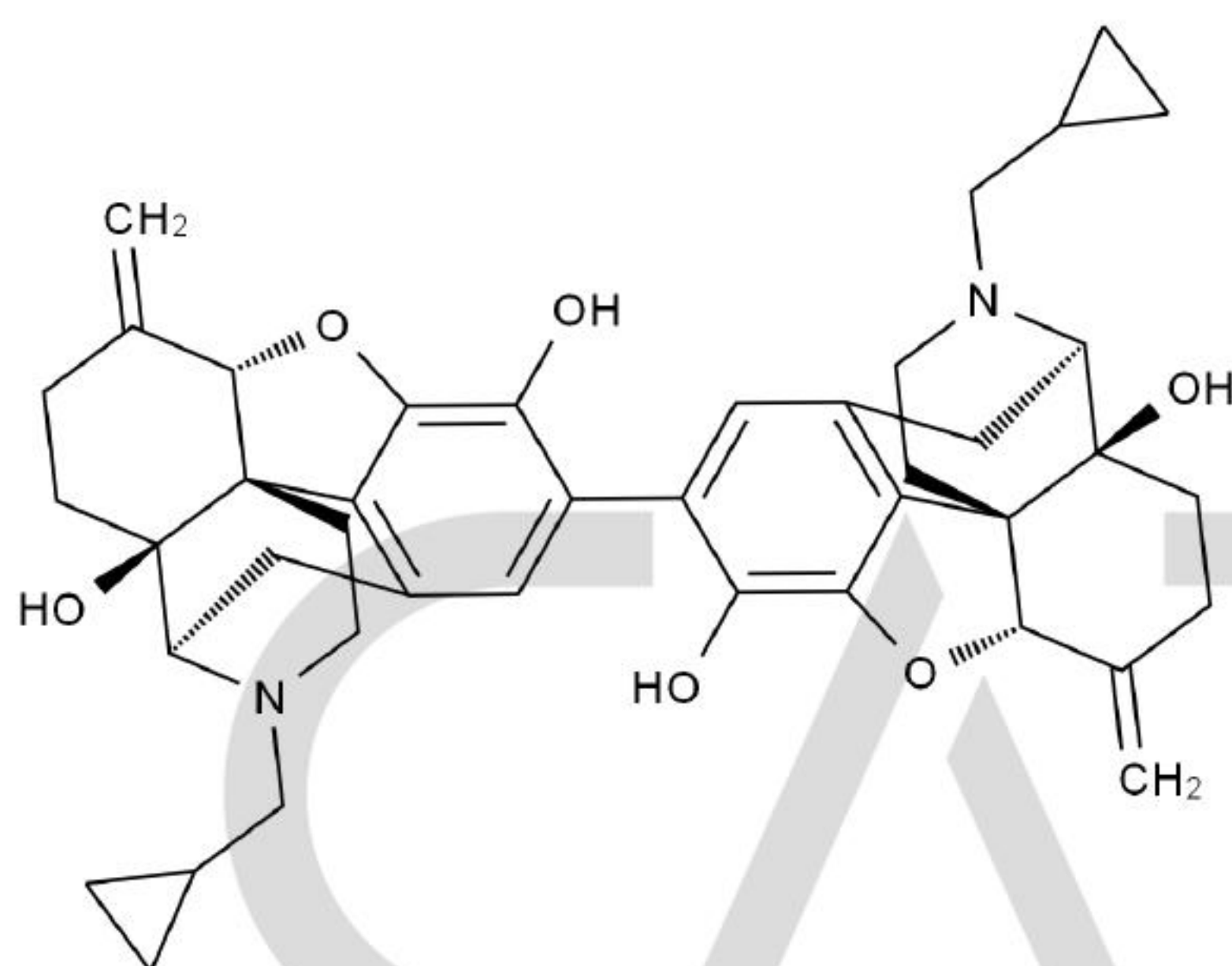


Certificate of Analysis

Reference Material & Standard

Product Name:	Nalmefene Impurity 12	Catalogue Number:	C4X-126812
Synonyms:	N/A	Lot Number:	0608-RH-0095
CAS Number:	176220-84-1	Expiry Date:	Jan 23, 2030
Molecular Formula:	C ₄₂ H ₄₈ N ₂ O ₆	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	676.84	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Grey Solid
Identification	LCMS&UV&HNMR	Confirmed
Purity	HPLC	99.418%
Water Content	Karl Fischer	0.11%
Residual Solvents	NMR	0.24% dichloromethane
Assay		99.1%

Comment:

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

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Reviewed by:

Approved by General Manager:

Date: Jun 11, 2026

Date: Jun 11, 2026

Date: Jun 11, 2026



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