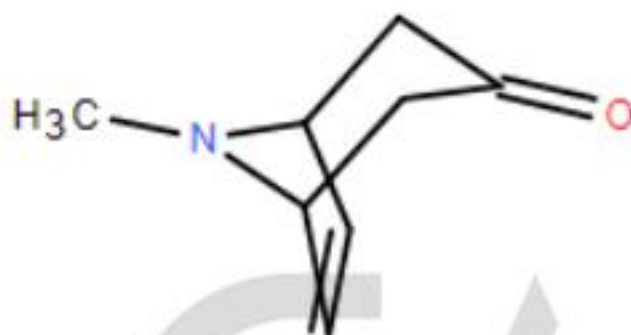


Certificate of Analysis

Reference Material & Standard

Product Name:	Tiotropium impurity 47	Catalogue Number:	C4X-176447
Synonyms:	N/A	Lot Number:	1213-SA-7534
CAS Number:	4438-38-4	Expiry Date:	Dec 12, 28
Molecular Formula:	C ₈ H ₁₁ NO	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	137.18		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Solid
Identification:	LC&HNMR	Confirmed
Purity:	HPLC	97.309%

Signature:

Prepared by:

Lisa

Reviewed by:

Yuki

Approved by General Manager:

David

Date: Dec 13, 24

Date: Dec 13, 24

Date: Dec 13, 24



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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	Dec 13, 24	First release.

