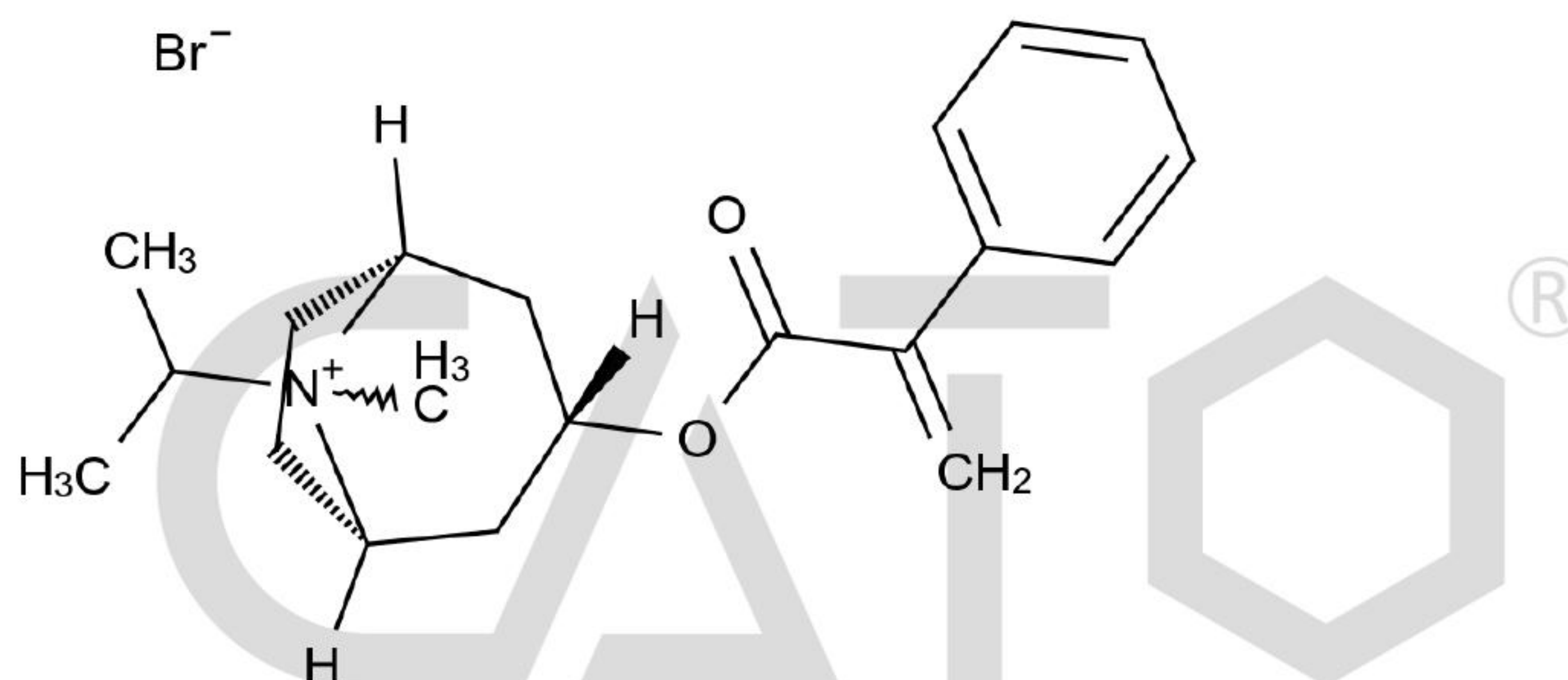


Certificate of Analysis

Reference Material & Standard

Product Name:	Ipratropium Impurity 24 (Mixture of Isomers)	Catalogue Number:	C4X-166524
Synonyms:	N/A	Lot Number:	0515-RH-0014
CAS Number:	17812-46-3	Expiry Date:	May 13, 2030
Molecular Formula:	C ₂₀ H ₂₈ NO ₂ Br	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	314.44 79.90	Shipping Condition:	Shipping with Ice Packs

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&CNMR&HNMR	Confirmed
Purity	HPLC	97.9853%
Loss on Drying	TGA	0.436%
Assay		97.6%

Comment:

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

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

Loss on Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Reviewed by:

Approved by General Manager:

Date: May 20, 2026

Date: May 20, 2026

Date: May 20, 2026



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